CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

AMENDED MONITORING AND REPORTING PROGRAM 6-00-57A05
WDID NO. 6B190107069

FOR

COUNTY SANITATION DISTRICT NO. 20 OF LOS ANGELES COUNTY
PALMDALE WATER RECLAMATION PLANT

Los Angeles County

The Monitoring and Reporting Program (MRP) for County Sanitation District 20 of Los Angeles County (Discharger) consists of this MRP and the following: (A) MRP 6-00-57A01, effective February 26, 2004; (B) MRP 6-00-57A02, effective April 14, 2004; (C) MRP 6-00-57A03, effective October 13, 2004; and (D) MRP 6-00-57A04, effective July 13, 2005. The MRP is being amended to include monitoring and reporting requirements for the proposed tertiary treatment plant and storage reservoirs.

I. MONITORING

A. Flow Monitoring

The following data shall be recorded in a permanent logbook and the information submitted according to the frequency listed:

1. The total volume, in million gallons (MG), of flow to the tertiary treatment plant for each day and month.

2. The calculated average flow rate, in million gallons per day (MGD) of flow to the tertiary treatment plant calculated for each month.

3. Storage reservoirs: The freeboard (the vertical distance between the top of the water level and the lowest point of a dike or overflow structure) for each reservoir shall be monitored and recorded weekly, and reported in the monitoring report.

B. Effluent Monitoring (Disinfected Tertiary-Treated Wastewater)

Samples of disinfected tertiary-treated wastewater shall be collected from the tertiary treatment plant and analyzed to determine the magnitude of the following parameters and the additional parameters listed in the attached Table No. 1:

Parameter	Units	Type	Minimum Frequency
Flow	MGD	Flow Meter and Recorder	Continuous
Turbidity[1]	NTU	Turbidity meter and recorder	Continuous
Total chlorine residual	mg/L	Chlorine residual meter & recorder	Continuous
Modal contact time[2]	Minutes	Calculated	Daily
CT value[3]	mg-minutes/L	Calculated	Daily
Total coliform bacteria	MPN/100ml	Grab sample	Daily
Dissolved Oxygen	mg/L	Grab	Weekly
Temperature	°C	Grab	Weekly

C. Groundwater Monitoring (Proposed Storage Reservoirs)

Before the discharge to the reservoir, the discharge shall establish background water quality. Discharge Specification II.C of the attached Order requires the Discharger to conduct a hydrogeological investigation and to install a minimum of one groundwater compliance monitoring well.

Beginning immediately, the Discharger shall collect samples from temporary monitoring well (well RB-15A) and any additional wells installed during the hydrogeologic investigation for a period of 1 year and analyze the samples to determine groundwater gradient, direction, and water quality (see Table 2).

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[1] For each 24-hour period, record and report the average turbidity, amount of time (minutes) the turbidity exceeded five (5) NTUs (if any), and the maximum turbidity.

[2] The modal contact time at the highest and lowest flows shall be recorded and reported for each 24-hour period where there is production of disinfected tertiary treated wastewater. The "modal contact time" is the amount of time elapsed between the time that a tracer, such as salt or dye, is injected into the influent at the entrance to a chamber and the time that the highest concentration of the tracer is observed in the effluent from the chamber. For the purpose of this determination, modal contact time shall be derived from a predetermined plot correlating modal contact times to varying flow conditions. (*22CCR§60301.600*)

[3] When chlorine is used as the disinfectant in production of disinfected tertiary treated wastewater, the lowest CT value shall be calculated for each 24-hour period. CT (mg-minutes per liter) = chlorine residual (mg/L) x modal contact time (minutes). To calculate the lowest value, first record the following data for the 24-hour period:

a. Modal contact time under highest flow and corresponding total chlorine residual at that time.
b. Lowest total chlorine residual and corresponding modal contact time.
c. Highest total chlorine residual and corresponding modal contact time.
d. Modal contact time under lowest flow and corresponding total chlorine residual at that time.

Next, calculate CT values for each of the four conditions, above. The lowest of the four calculated CT values is the lowest CT for the period.

Before discharging treated wastewater to the storage reservoirs, the Discharger shall complete installation of the additional required compliance monitoring wells and complete the following minimum numbers of sampling rounds for parameters listed in Table No. 2 (attached):

1. Eight rounds for total dissolved solids (TDS) and nitrate in each compliance monitoring well, and

2. Two rounds for the other parameters in each compliance monitoring well.

After beginning the discharge of treated- wastewater to the storage reservoirs, the Discharger shall collect samples from the wells and analyze the samples to determine the magnitude of the parameters listed in Table 2 in accordance with the frequency in that table.

Field parameters shall be determined in all monitoring wells each time they are sampled to determine the following.

Parameters	Units
Static water depth	Feet below ground surface
Electrical conductivity	uS/cm
pH	pH units
Temperature	Degrees C
Dissolved Oxygen	mg/L
Turbidity	NTU
Color	Visual

The field parameters from each well shall be reported in a separate table.

D. Data Presentation for Compliance Determinations (Proposed Storage Reservoirs Site)

Annual monitoring reports shall contain:

1. An 11" x 17" copy of a site plan showing the site boundaries, reservoirs, groundwater monitoring wells, and groundwater and land surface elevations. The site plan shall include ground water equipotential lines in the upper portion of the aquifer.

2. Graphs showing long-term trends of groundwater elevations as measured in groundwater monitoring wells.

3. Graphs (concentration versus time) showing long-term trends in concentrations of the following constituents in groundwater monitoring wells: TDS and Nitrate,

4. Graphs (concentration versus time) showing long-term trends in concentrations of the following constituents in the tertiary-treated effluent: BOD, CBOD, COD, N03, Kjeldahl Nitrogen, Ammonia, Turbidity, and Chlorine residual.

E. Biosolids Monitoring (Proposed Tertiary Treatment Plant and Storage Reservoirs)

The following shall be recorded monthly and reported in the quarterly monitoring reports:

1. Total quantity of biosolids generated during the monitoring period.

2. Date and quantity of biosolids removed off site, location of use, recipient (including name and address) and biosolids reuse or disposal method. The type of crop grown, if biosolids are directly land applied at an offsite location,

3. Cumulative total quantity of biosolids currently stored on site including the quantity of biosolids added during this monitoring period.

The Discharger shall include in each monitoring report the amount and type of all grit and screenings hauled off site for disposal or recycle. The person or company doing the hauling and the legal point of disposal or recycle shall also be recorded.

F. Operation and Maintenance Monitoring

A brief summary of any operational problems and maintenance activities shall be submitted to the Water Board with each quarterly monitoring report.

This summary shall discuss:

1. Any major modifications or additions to the treated wastewater conveyance, treatment, or storage facilities.

2. Any major maintenance conducted on the treated wastewater conveyance, treatment, or storage facilities.

3. Any major problems occurring in the treated wastewater conveyance, treatment, or storage facilities.

4. The calibration of any wastewater flow measuring devices.

G. Laboratory Analyses

1. General

Sample results greater than or equal to the reported Minimum Level (ML) shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample). Sample results less than the reported ML, but greater than or equal to the laboratory's Method Detection Limit (MDL), shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy, (+/- a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

2. Disinfection By-Products (DBPs)

DBPs shall be analyzed using a laboratory method with the following Minimum Reporting Levels:

DBPs	Minimum Reporting Level (micrograms/Liter)
Total trihalomethanes (TTHM)	80
Bromodichloromethane	0.5
Bromoform	0.5
Chloroform	0.5
Dibromochloromethane	0.5
Haloacetic acids (five) (HAA5)	60
Monochloroacetic Acid	2
Dichloroacetic Acid	1
Trichloroacetic Acid	1
Monobromoacetic Acid	1
Dibromoacetic Acid	1
N-Nitrosodimethylamine (NDMA)	0.002

For NDMA analyses, the Discharger is considered to be in compliance with requirements pertaining to the method of laboratory analysis (contained in Provision 1.a, 1.b and 1.c of the attached General Provisions for Monitoring and Reporting), if the Discharger uses a modified USEPA method (e.g., USEPA method 1625) in order to achieve a reporting limit of two (2) nanogram per liter (ng/L).

3. Dioxins and polychlorinated biphenyls (PCBs)

Monitoring for dioxins and polychlorinated biphenyls (PCBs) is not required.

4. Chromium

Use appropriate USEPA approved methods that will quantify concentrations down to 0.0025 mg/l for hexavalent chromium and 0.05 mg/l for total chromium.

II. REPORTING

A. General Provisions and Reports

1. The Discharger shall comply with the "General Provisions for Monitoring and Reporting," (GPMR - Attachment "B") dated September 1, 1994, which is attached to and made part of this Monitoring and Reporting Program.

B. Submittal Periods

The Discharger must submit monitoring reports according to the following schedule:

1. The following reports must be provided on a monthly frequency in accordance with schedule contained in Monitoring and Reporting Programs 6-00-57A01, Section II.B.1:

   a. Flow Monitoring;
   b. Effluent Monitoring; and
   c. Operation and Maintenance Monitoring.

2. The following reports must be provided on a quarterly frequency in accordance with schedule contained in Monitoring and Reporting Programs 6-00-57A01, Section II.B.2:

   a. Effluent Monitoring (Data collected quarterly, semiannually and annually);
   b. Ground Water Monitoring;

3. The Biosolids Monitoring report must be provided on annual frequency in accordance with schedule contained in Monitoring and Reporting Programs 6-00-57A01, Section II.B.3 (as amended by Monitoring and Reporting Programs 6-00-57A03).

Ordered by: _____ Dated: August 29, 2007
HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments: A. Tables 1 and 2
B. General Provisions for Monitoring and Reporting

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Table No. 1
Tertiary Treatment Plant Effluent

Parameter	Sampling Frequency (Effluent)	Type of Sample
pH	W	Grab
Biochemical Oxygen Demand (BOD)	M	24-hour composite
Carbonaceous BOD	M	24-hour composite
Chemical Oxygen Demand	M	24-hour composite
Total Organic Carbon	Q	24-hour composite
Methylene Blue Active Substances	Q	24-hour composite
Kjeldahl Nitrogen	M	24-hour composite
Nitrate Nitrogen	M	24-hour composite
Nitrite Nitrogen	M	24-hour composite
Ammonia Nitrogen	M	24-hour composite
Chloride	Q	24-hour composite
Sodium	Q	24-hour composite
Sulfate	Q	24-hour composite
Calcium	Q	24-hour composite
Magnesium	Q	24-hour composite
Total Dissolved Solids	Q	24-hour composite
Haloacetic acids (HAA5)	Q	Grab
Total Trihalomethanes (THMs)	Q	Grab
N-Nitrosodimethylamine (ND	Q	24-hour composite
Total Petroleum Hydrocarbons	Y	Grab
Total chromium	Y	24-hour composite
Hexavalent chromium	Y	Grab
Total Cyanides	Y	24-hour composite
Total Phenols	Y	24-hour composite
Volatile Organics	Y	Grab
Semivolatile Organics	Y	24-hour composite
Heavy Metals	Y	24-hour composite
Methyl Tertiary Butyl Ether	Y	Grab

W=Weekly, M=Monthly, Y =

Table No. 2
Groundwater Monitoring Wells, Proposed Reservoirs

Parameter	Sampling Frequency
pH	Q
Total Organic Carbon	Q
Methylene Blue Active Substances	Q
Kjeldahl Nitrogen	Q
Nitrate Nitrogen	Q
Nitrite Nitrogen	Q
Ammonia Nitrogen	Q
Chloride	Q
Sodium	Q
Sulfate	Q
Calcium	Q
Magnesium	Q
Total Dissolved Solids	Q
Haloacetic acids (HAA5)	Y
Total Trihalomethanes (THMs)	Y
N-Nitrosodimethylamine (NDMA)	Y
Total Petroleum Hydrocarbons	Y
Total chromium	Y
Hexavalent chromium	Y
Total Cyanides	Y
Total Phenols	Y
Volatile Organics	Y
Semivolatile Organics	Y
Heavy Metals	Y
Methyl Tertiary Butyl Ether	Y

Y = Annually, S = Semiannually and Q = Quarterly

ATTACHMENT B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

a. All analyses shall be performed in accordance with the current edition(s) of the following documents:

i. Standard Methods for the Examination of Water and Wastewater

ii. Methods for Chemical Analysis of Water and Wastes, EPA

b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.

c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.

d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.

e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.

f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.

g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.

b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

d. Monitoring reports shall be signed by:

i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

ii. In the case of a partnership, by a general partner;

iii. In the case of a sole proprietorship,by the proprietor; or

iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

e. Monitoring reports are to include the following:

i. Name and telephone number of individual who can answer questions about the report.

ii. The Monitoring and Reporting Program Number.

iii. WDID Number.

f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars ($1,000) for each day of violation under Section 13268 of the Water Code.