

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

**MONITORING AND REPORTING PROGRAM NO. R6V-2012-(PROPOSED)
WDID NO. 6B190107069**

**MASTER WATER RECYCLING REQUIREMENTS AND
WASTE DISCHARGE REQUIREMENTS
COUNTY SANITATION DISTRICT NO. 20 OF LOS ANGELES COUNTY
(PALMDALE)
DISINFECTED TERTIARY RECYCLED WATER**

Los Angeles County

I. MONITORING

A. Flow Monitoring

1. County Sanitation District No. 20 of Los Angeles County (District) shall record the total volume, in million gallons, and the average flow rate, in million gallons per day (mgd), of recycled water provided by the District to each Authorized Water Use site. This information must be recorded and reported for each calendar month.
2. The District shall record the total volume, in million gallons, and the monthly average 24-hour flow rate, in mgd, of recycled water supplied by the Activated Sludge/Nitrification-Denitrification Plant (Stage V Plant Expansion) into the North Los Angeles/Kern County Regional Recycled Water Project distribution system. This information must be recorded and reported for each calendar month.

B. Agronomic Application Rate Monitoring for Fertilizers and Recycled Water

1. For each calendar month, the District shall record, and provide a tabular comparison of, the:
 - a. agronomic rate (volume of water) of each irrigated area;
 - b. volume of recycled water (and non-recycled supplemental water) applied to each irrigated area; and
 - c. number of acres for each irrigated area.
2. For each calendar month, the District shall record, and provide a tabular comparison of, the:
 - a. agronomic rate of nitrogen (N) for each landscape and agricultural area;
 - b. total amount of N applied to each area, including the amount of N in the recycled water and the amount of N in any fertilizer applied;

- c. total amount of N applied to each area, including the amount of N in the recycled water and the amount of N in any fertilizer applied; and
- d. number of acres for each area.

Both the Lancaster Water Reclamation Plant and the Palmdale Water Reclamation Plant will be simultaneously providing recycled water to the North Los Angeles/Kern County Regional Recycled Water Project distribution system. When this occurs, the District shall use the highest nutrient levels provided from either reclamation plant at any given time when reporting agronomic rate and total amounts of N, above.

C. Recycled Water Quality Monitoring

The District must collect and analyze samples of the recycled water supplied by the Stage V Plant Expansion for reuse by recycled water users in accordance with the following table:

Parameter	Units	Type	Minimum Frequency
Turbidity ¹	NTU	Recorder	Continuous
Total Chlorine Residual	mg/L	Recorder	Continuous (When chlorine is used as disinfectant)
Modal Contact Time ²	minutes	Calculated	Daily (When chlorine is used as disinfectant)
CT Value ³	mg-minutes/L	Calculated	Daily (When chlorine is used as disinfectant)
Total Coliform	MPN/100mL	Grab	Daily
Kjeldahl Nitrogen	mg/L	Composite	Monthly
Ammonia Nitrogen	mg/L	Composite	Monthly
Nitrate Nitrogen	mg/L	Composite	Monthly
Total Dissolved Solids	mg/L	Composite	Quarterly
Sulfate	mg/L	Composite	Quarterly
Chloride	mg/L	Composite	Quarterly
Total Trihalomethanes	µg/L	Grab	Quarterly
n-nitrosodimethylamine	µg/L	Composite	Quarterly
Priority Pollutants, excluding asbestos (Appendix A to 40 CFR part 423)	as specified	Grab or composite	Semi Annually

¹For each 24-hour period, record and report the following: Stage V Tertiary Treatment Plant: average turbidity, amount of time (minutes) the turbidity exceeded five (5) NTUs (if any), and the maximum turbidity.

²The modal contact time at the highest and lowest flows must be recorded and reported for each 24-hour period, where there is production of disinfected tertiary recycled water. 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. (CCR, title 22, sec 60301.600)

³When chlorine is used as the disinfectant in production of disinfected tertiary recycled water, the lowest CT value must be calculated for each 24-hour period. CT (mg-minutes per liter) = chlorine residual (mg/L) × 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.

D. Quarterly Recycled Water Use Monitoring

The District must record the following information each quarter (quarters defined in Requirement No. II.B, below) in accordance with Water Code section 13523.1 subdivision (b)(4):

1. Total amount of recycled water supplied into the North Los Angeles/Kern County Regional Recycled Water Project distribution system during the quarter.
2. The total number of sites that received recycled water during the quarter.
3. A list of all recycled water use sites. For each site, the list must include:
 - a. site name,
 - b. site location
 - c. name of underlying hydrologic area
 - d. user name
 - e. type of use
 - f. site area (acres)
 - g. date of District recycled water use approval
4. A map of suitable scale showing the boundary of the Permit Area (as defined by Finding No. 9 of Board Order R6V-2012-PROPOSED and showing the approved recycled water use site locations.

E. Inspections and Enforcement Monitoring

1. The District must provide in its annual report (see Requirement No. II.D, below) an inspection schedule for all recycled water use facilities. The inspection schedule shall document the date of each facility's prior

inspection and its respective compliance status. Any facility with a reported incidence of noncompliance in its most recent inspection report must be re-inspected no later than one year from its prior inspection. Any facility that was in compliance during its most recent inspection must be scheduled for a re-inspection no later than three years from its prior inspection.

2. The District must record and report on a quarterly basis all recycled water use sites inspected pursuant to Requirement No. I.B.4 of Board Order No. R6V-2012-PROPOSED during each respective quarter (See Requirement No. II.B, below). The list of sites inspected must include the following information for each recycled water use site:
 - a. Date of inspection, name of recycled water use site, user name, and type of use.
 - b. A description of all noted violations (including compliance with Requirement Nos. I.C.1 through I.C.15 of Board Order No. R6V-2012-PROPOSED
 - c. The date compliance was achieved and the respective corrective action taken, if applicable.
 - d. A description of enforcement action taken (if any), including any schedule for achieving compliance.
 - e. Date of prior compliance inspection.
3. The District must ensure that monthly inspections of all Best Management Practices (BMPs) in place to prevent contamination of potable water supplies (including groundwater) are completed. The results of such inspections and measures taken to maintain and repair these BMPs must be reported by the District in its quarterly report (see Requirement No. II.B, below).
4. The District must ensure that annual visual inspections of the recycled water distribution system for cross connections with the potable water supply are completed.
5. The District must ensure that the recycled water distribution system is annually inspected for leaks or drops in pressure, and that pressure tests are conducted at a minimum once every three years.

F. Operation and Maintenance Monitoring

The District must record and maintain records of all actions and analytical results necessary to demonstrate compliance with California Department of Public Health conditions identified in Board Order No. R6V-2012-PROPOSED Requirement No. II.B. and to document any operational problems and maintenance activities with the recycled water treatment facilities, distribution

system, and user sites. The District must submit a brief summary of its findings to the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) with each quarterly monitoring report. This summary must discuss the elements listed below.

1. All modifications or additions to the recycled water treatment facilities, distribution systems, and user sites;
2. Test results of all backflow prevention devices at each recycled water use site.
3. The results of cross connection inspections at each authorized recycled water use site.
4. Test results of the recycled water distribution system pressure testing.
5. Any non-routine maintenance conducted on the recycled water treatment facilities, distribution system, and user systems.
6. Any major problems occurring to the recycled water treatment facilities, distribution system, and user systems.
7. Calibration results of any recycled water flow measuring devices.

II. REPORTING

A. General Provisions

1. The District must comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of this Monitoring and Reporting Program (Attachment A).
2. The District must comply with the Sampling and Analysis Plan that was submitted on April 14, 2011, which is attached to and made part of this Monitoring and Reporting Program (Attachment B).

B. Quarterly Reports

Beginning on **June 1, 2012**, quarterly monitoring reports including the preceding information must be submitted to the Lahontan Water Board by the first day of the third month following each quarterly monitoring period [Water Code section 13523.1, subdivision (b)(4)].

Quarterly monitoring periods are defined as follows:

First Quarter	January 1 - March 31
Second Quarter	April 1 - June 30
Third Quarter	July 1 - September 30
Fourth Quarter	October 1 - December 31

C. Semi-Annual Report

Beginning on **September 1, 2012**, semi-annual monitoring data including the preceding information must be submitted to the Lahontan Water Board by the first day of the third month following each semi-annual monitoring period [Water Code section 13523.1, subdivision (b)(6)]. Data that are required on a semi-annual basis will be incorporated into the quarterly report that coincides with the period for which the analyses are required.

Semi-annual monitoring periods are defined as follows:

First half	January 1 - June 30
Second half	July 1 – December 31

D. Annual Report

Beginning on **March 1, 2013** and continuing thereafter, the District must submit an annual report to the Lahontan Water Board with the information listed.

1. Documentation of the District's compliance status with Board Order No. R6V-2012-PROPOSED, including progress made towards developing the salt/nutrient management plan that is required by Board Order No. R6V-2012-PROPOSED, Requirement No. III.A.
2. The compliance record and the corrective actions taken or scheduled/planned to return the District into full compliance with Board Order No. R6V-2012- PROPOSED.
3. The District's time schedule for completing corrective actions needed to achieve compliance.

Ordered by: _____ Dated: _____

HAROLD J. SINGER
EXECUTIVE OFFICER

Attachment A: [General Provisions for Monitoring and Reporting Program](#)
Attachment B: [Sampling and Analysis Plan](#)