

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. 88-37

WASTE DISCHARGE REQUIREMENTS
AND
WATER RECLAMATION REQUIREMENTS

FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

(La Canada Water Reclamation Plant - Dist. #28)

(File No. 61-156)

The California Regional Water Quality Control Board, Los Angeles Region finds:

1. County Sanitation Districts of Los Angeles County (hereinafter referred to as "Reclaimer") operates La Canada Water Reclamation Plant, located at 533 Meadow View Drive, La Canada, California with a design flow of 200,000 gallons per day. Average daily discharge is 100,000 gallons per day and all is reclaimed for golf course irrigation under requirements contained in Resolution No. 61-46 adopted by this Board on October 18, 1961.
2. The wastewater reclamation treatment system is an extended aeration activated sludge plant consisting of a comminutor, aeration tank, secondary settling tank, and chlorination. The treated wastewater effluent is commingled with up to 90% of domestic water in an on-site holding reservoir prior to golf course irrigation.
3. A recent analysis of the domestic water supply to the golf course and surrounding area indicated total dissolved solids concentrations in excess of 500 mg/l and sulfate concentrations of 200 mg/l. These concentrations exceed Basin Plan Requirements of 450 mg/l total dissolved solids and 100 mg/l sulfate, respectively.
4. Waste sludge is hauled by vacuum trucks to a sanitation districts' sewer manhole in Altadena for transport and treatment at the Reclaimer's Carson facility.
5. The treatment facility and golf course landscape irrigation site are located in Section 31, T2N, R12W, and Section 36, T2N, R13W within The Monk Hill Subunit Of the Raymond Hydrounit.

6. The Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on November 27, 1978. The Water Quality Control Plan contains water quality objectives for the ground water of the Raymond Hydro Subunit. The fresh water supply to the La Canada area at this time makes it impossible to meet the water quality objectives of the Basin Plan. Wastewater discharge limits have been adjusted to reflect this condition.
7. The beneficial uses of the ground water within the Raymond Hydro Subunit are municipal and domestic supply, industrial service supply and process supply.
8. This project involves an existing facility and as such is exempt from the provisions of the California Environmental Quality Act in accordance with California Administrative Code, Title 14, Chapter 3, Section 15301.
9. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations of the State Department of Health Services and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide reclamation criteria.
10. The use of reclaimed water for impoundments or for irrigation could affect the public health, safety, or welfare; requirements for such use are therefore necessary in accordance with Section 13523 of the Water Code.

The Board has notified the dischargers and interested agencies and persons of its intent to revise waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that County Sanitation Districts' La Canada Water Reclamation plant shall comply with the following:

A. Effluent Limitations

1. Wastes discharged shall be limited to treated domestic wastewater only.
2. Waste discharged shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Maximum Limitations</u>
Total dissolved solids		
solids	mg/l	1,000
Chloride	mg/l	175
Sulfate	mg/l	250
- Boron	mg/l	0.5
- Fluoride	mg/l	1.0

3. The pH of waste discharged shall at all times be within the range 6.0 to 9.0.
4. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, California Administrative Code, or subsequent revisions.
5. Reclaimed water shall not cause the nitrogen content in the receiving ground water to exceed the objectives in the Water Quality Control Plan.

B. Specifications for Use of Reclaimed Water

1. Reclaimed water used for the irrigation of golf courses, cemeteries, freeway landscapes, and landscapes in other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized wastewater.

The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 240 per 100 milliliters in any two consecutive samples.

Oxidized wastewater means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

Disinfected wastewater means wastewater in which the pathogenic organisms have been destroyed by chemical, physical or biological means.

2. Reclaimed water used for the irrigation of parks, playgrounds, schoolyard, and other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability.

The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in any sample.

A coagulated wastewater means an oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated by the addition of suitable floc-forming chemicals or by an equally effective method.

A filtered wastewater means an oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

3. Reclaimed water used as a source of supply in a nonrestricted recreational impoundment shall be at all times and adequately disinfected, oxidized, coagulated, clarified, filtered wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed.

4. Reclaimed water used as a source of supply in a restricted recreational impoundment shall be at all times an adequately disinfected, oxidized wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

5. Reclaimed water shall not be directly used for uses other than those enumerated above until requirements for these uses have been established by this Board in accordance with Section 13523 of the California Water Code, unless the Board waives such requirements or finds that the above cited standards are applicable to these uses.
6. Reclaimed water uses shall meet the requirements specified in the "Guidelines for Use of Reclaimed Water" issued by the State Department of Health Services.

7. Reclaimed water used for irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow except as provided for in a National Pollutant Discharge Elimination System Permit.

For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order.

8. Reclaimed water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions. Special precautions must be taken to prevent clogging of spray nozzles, to prevent overwatering and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leaks.
9. Reclaimed water used for irrigation shall not be allowed to run off into recreational lakes unless it meets the criteria for such lakes.

C. General Requirements

1. The discharge or use of raw or inadequately treated sewage at any time is prohibited.
2. Reclaimed water shall not be used for irrigation during periods of extreme rainfall and/or runoff.
3. Standby or emergency power facilities and/or sufficient capacity shall be provided for reclaimed water storage during rainfall or in the event of plant upsets or outages, and at times when spray irrigation cannot be practiced.
4. A proposal to eliminate plant effluent, containing Nitrate concentrations in excess of Primary Drinking Water Standards, from migrating into underlying aquifers shall be submitted for the Executive Officers approval within 30 days of adoption of this Order. The proposal shall detail operational corrections, pond liners, replacement tanks, or other methods to eliminate such discharge.
5. Reclaimed water use or disposal shall not result in earth movement in geologically unstable areas.
6. Adequate facilities shall be provided to protect the sewage treatment and reclamation facilities from damage by storm flows and runoff.
7. Adequate freeboard shall be maintained in reclaimed water storage pond to ensure that direct rainfall will not cause overtopping.
8. Neither treatment of waste nor any reclaimed water use or disposal shall cause pollution or nuisance.

9. Water reclamation and reuse or disposal shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.
10. Reclaimed water use or disposal shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving ground waters.
11. Reclaimed water use or disposal which could affect receiving ground waters shall not contain any substance in concentrations toxic to human, animal, or plant life.
12. Odors of sewage origin shall not cause a nuisance.

D. Provisions

1. A copy of these requirements shall be maintained at the reclamation facility so as to be available at all times to operating personnel.
2. In the event of any change in name, ownership, or control of this waste treatment and disposal facility the discharger shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this order by letter, copy of which shall be forwarded to the Board.
3. In accordance with Section 13522.5 of the Water Code and Section 60323 of the Wastewater Reclamation Criteria, the Reclaimer shall file an engineering report, prepared by a properly qualified engineer registered in California, of any material change or proposed change in character, location or volume of the reclaimed water or its uses to the Board and State Department of Health Services.
4. The Reclaimer shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Programs, as directed by the Executive Officer.
5. The Reclaimer shall notify this Board by telephone within 24 hours of any violations of reclaimed water use conditions or any adverse conditions as a result of the use of reclaimed water from this facility; written confirmation shall follow within one week.
6. The Reclaimer shall notify Board staff by telephone immediately of any confirmed coliform counts that could cause a violation of the 7-day median limits, including the date(s) thereof. This information shall be confirmed in the next monitoring report; in addition, for any actual coliform limit violations that occurred, the report shall also include the reasons for the high coliform results, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

7. These requirements do not exempt the Reclaimer from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this reclamation facility, and they leave unaffected any further restraint on the use of reclaimed water at this site which may be contained on other statutes or required by other agencies.
8. The Reclaimer shall be responsible to insure that all users of reclaimed water comply with the specifications and requirements for such use.
9. This Order does not alleviate the responsibility of the Reclaimer to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of this facility from its current capacity shall be contingent upon issuance of all necessary permits, including a conditional use permit.
10. In accordance with Section 13260 of the Water Code, the Reclaimer shall file a report of any material change or proposed change in character, location or volume of the discharge.
11. Supervisors and operators of this publicly owned wastewater treatment plant shall possess a certificate of appropriate grade as specified in California Administrative Code, Title 23, Chapter 3, Subchapter 14, Section 2455 and 2460.
12. The Reclaimer shall provide to each user of reclaimed water from La Canada Water Reclamation Plant a copy of these requirements, to be maintained at the user's facility as to be available at all times to operating personnel.
13. For any extension of the reclaimed water system, the Reclaimer shall submit a report detailing the extension for the approval of the Executive Officer. Following construction, as built drawings shall be submitted to the Executive Officer for approval prior to use of reclaimed water.
14. The discharger shall submit to the Board within 60 days of the adoption of this Order, procedures that will be (or have been) taken to assure that discharge of untreated sewage from the treatment facility in the event of equipment failure will not occur.
15. Raw sewage or partially dried waste sludge shall not be spread on ground surface.
16. Off site disposal of sewage or sludge shall be only to a legal point of disposal. For the purpose of these requirements, a legal point of disposal is defined as one which waste discharge requirements have

been established by a California Regional Water Quality Control Board.

17. Resolution No. 61-46, adopted by this Board on October 18, 1961, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on March 28, 1988.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 3139

FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(La Canada Water Reclamation Plant)
(File No. 61-156)

The Reclaimer shall implement this monitoring program within 60 days of the effective date of this Order.

Monitoring reports shall be submitted by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

The first monitoring report under this program shall be submitted by November 15, 1988.

By March 1 of each year beginning 1989, the Reclaimer shall submit an annual report to the board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Reclaimer shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the Requirements.

Reclaimed Water Monitoring

A sampling station shall be established where representative samples of reclaimed water can be obtained. Reclaimed water samples may be obtained at a single station provided that station is representative of the quality at all discharge points. Each sampling station shall be identified. The following shall constitute the reclaimed water monitoring program:

County Sanitation Districts
of Los Angeles County
La Canada Reclamation Plant
Monitoring & Reporting
Program No. 3139

File No. 61-156

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Turbidity	NTU	continuous	-----
Total flow[1]	gallon	continuous	-----
Coliform group[2]	MPN/100ml	grab	daily
pH	pH units	grab	daily
Total dissolved solids	mg/l	24-hr composite	monthly
Chloride	mg/l	24-hr composite	monthly
Boron	mg/l	24-hr composite	monthly
Sulfate	mg/l	24-hr composite	monthly
Nitrate	mg/l	24 hr composite	monthly
Fluoride	mg/l	24-hr composite	monthly
Arsenic	mg/l	24-hr composite	annually
Barium	mg/l	24-hr composite	annually
Cadmium	mg/l	24-hr composite	annually
Chromium	mg/l	24-hr composite	annually
Lead	mg/l	24-hr composite	annually
Mercury	mg/l	24-hr composite	annually
Selenium	mg/l	24-hr composite	annually
Silver	mg/l	24-hr composite	annually
Cyanide	mg/l	24-hr composite	annually
Radioactivity	pCi/l	24-hr composite	annually

[1] Shall report the daily volume of reclaimed water used at each site of use.

[2] 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 facility and disinfection procedures. The location(s) of the sampling point(s) and any changes thereto must be approved by the Executive Officer, and proposed changes shall not be made until such approval has been granted. If reclaimed water is used for irrigation of golf courses, cemeteries, freeway landscapes, parks, playgrounds, schoolyards, or other areas where the public has similar access or exposure, samples shall be obtained subsequent to the chlorination procedure. Coliform values obtained must meet the strictest requirement specified for all uses during periods of multiple use, unless separate coliform analyses are obtained at each particular point of use.

General Provisions for Sampling and Analysis

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", as promulgated by the United States Environmental Protection Agency.

All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board or approved by the Executive Officer.

General Provisions for Reporting

For every item where the requirements are not met, the Reclaimer 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 submit a timetable for correction.

The Reclaimer shall maintain all sampling and analytical results, including strip charts; date, exact place, and time of sampling; dates analyses were performed; 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 Board.

In reporting the monitoring data, the Reclaimer shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with Water Reclamation Requirements and, where applicable, shall include results of receiving water observations.

The Reclaimer shall file a report with this Board describing the purposes for which reclaimed water from this facility is used, estimating quantities used for each type of use, depicting on a map or drawing the area(s) of use, and stating the name and address of each user of reclaimed water if other than the Reclaimer. This report shall be updated at least annually, and shall be included with the annual report due March 1 each year.

Each quarterly report shall include a statement that all reclaimed water was used only as specified in the requirements during the quarter.

If no water was delivered for reuse during the quarter, the report shall so state.

Monitoring reports shall be signed by:

- a. In the case of 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 discharge originates.
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of municipal, state or other public facility, by either a principal Executive Officer, ranking elected official, or other duly authorized employee.

Each report shall contain the following completed declaration:

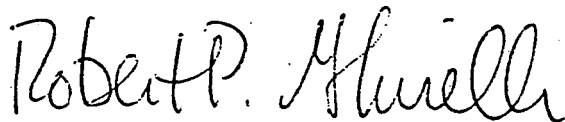
"I declare under penalty of perjury that the foregoing is true and correct. Executed on the _____ day of _____ at

_____.

Signature

Title"

These records and reports are public documents and shall be made available for inspection during business hours at the offices of the California Regional Water Quality Control Board, Los Angeles Region.



ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date: March 28, 1988

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