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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION

SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012-4596
(213) 620-4460



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July 9, 1987

Mr. Robert W. Horvath
Head, Monitoring and Research
County Sanitation Districts of
Los Angeles County
P.O. Box 4998
Whittier, CA 90607

WATER RECLAMATION REQUIREMENTS - LONG BEACH WATER RECLAMATION PLANT
(FILE NO. 69-80; CI 6184)

Reference is made to our letter dated May 4, 1987 which transmitted the requirements for your reuse of treated effluent.

By mistake, the copy transmitted did not include the revisions made on April 10, 1987. Enclosed is the corrected copy of the requirements as adopted by the Board on April 27, 1987.

We regret any inconvenience this may have caused.

If you have any questions, please call Mr. Gregg Kwey at (213) 620-2784.

[Handwritten signature]
J. E. ROSS
Senior Water Resource
Control Engineer

cc: See attached mailing list

Enclosures

*Middle
Horvath
7-21-87*

Doc #

State
7-23-87
C. W. CARBY

Mr. Robert W. Horvath
Mailing List

State Water Resources Control Board, Division of Water
Quality, Attn: Archie Matthews
Department of Water Resources
Department of Health Services, Sanitary Engineering Section
Los Angeles County, Department of Health Services
Los Angeles County, Department of Public Works, Hydraulic/Water
Conservation Division
Los Angeles County, Department of Public Works, Engineering
Services Division
City of Long Beach, Health Department
Long Beach Water Department
Long Beach Bureau of Parks and Recreation
2760 Studebaker Rd., Long Beach, CA 90815
American Golf Corporation
641 North Sepulveda Bl, Los Angeles, CA 90049
California Department of Transportation
P.O. Box 2304, Los Angeles, CA 90806
Long Beach Unified School District
151 East 27th St., Long Beach, CA 90806
California State University, Long Beach
1331 Palo Verde Ave., Long Beach, CA 90840
Seaside Lawn Bowls, Inc.
2728 East 1st St., Long Beach, CA 90803
Akira Kitano
5431 East Spring St., Long Beach, CA 90808
David Sasuga
P.O. Box 4251, Long Beach, CA 90808

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

ORDER NO. 87-47

WATER RECLAMATION REQUIREMENTS
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Long Beach Water Reclamation Plant)
(File No. 69-80)

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 Long Beach Water Reclamation Plant, located at 7400 East Willow Street, Long Beach, California, with a design flow of 25 million gallons per day, and discharges reclaimed water to the City of Long Beach reclaimed water line under requirements contained in Order No. 79-131 adopted by this Board on July 23, 1979.
2. The City of Long Beach Water Department, the primary user of this reclaimed water, recently completed Stage 5 of their reclaimed water system. Stage 5 involves delivery of reclaimed water to six new reuse sites within the City of Long Beach and is the final stage in the City of Long Beach's master plan for the use of reclaimed water. Reclaimed water from the Long Beach Water Reclamation Plant may be used for impoundment and landscape irrigation on about 1,325 acres of public land as proposed by the City of Long Beach's master plan for use of reclaimed water. The City's primary uses are irrigation of parks, golf courses, athletic fields, and landscaped area.
3. The treatment consists of primary sedimentation, activated sludge, secondary sedimentation, filtration and chlorination. The sludge is piped to, and processed in the County Sanitation Districts' Joint Water Pollution Control Plant in Carson.
4. The treated wastewater may also be discharged to Coyote Creek and San Gabriel River under separate waste discharge requirements and National Pollution Discharge Elimination System permit (NPDES Permit No. CA0054119) adopted by this Board.
5. The areas of reclaimed water use are located in Sections 24 and 25, T4S, R12W, SBB & M, within the Central Basin, Coastal Plain Subunit.

6. The Bellflower Aquiclude underlies the local area and separates the shallow ground water, or semiperched aquifer where it exists, from the deeper production aquifers. This aquiclude restricts deep percolation of reclaimed waters to the water supply aquifers.
7. The waters of the semiperched aquifer are of relatively poor mineral quality and are not beneficially used.
8. The Board adopted a Revised Water Quality Control Plan for Los Angeles River Basin on November 27, 1978. The Plan contains water quality objectives for ground water in Central Basin, Coastal Plain Subunit. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.
9. Ground water in the Coastal Plain is beneficially used for municipal and domestic supply, agricultural supply, and industrial service and process supply.
10. 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.
11. 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.
12. 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.

The Board has notified the Reclaimer and interested agencies and persons of its intent to prescribe water reclamation requirements 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 reclamation and to the tentative requirements.

IT IS HEREBY ORDERED, that County Sanitation Districts of Los Angeles County, shall comply with the following:

A. Reclaimed Water Limitations

1. Reclaimed water shall be limited to treated municipal wastewater only, as proposed.
2. Reclaimed water shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Maximum Limitations</u>
Total dissolved solids	mg/l	1,000
Chloride	mg/l	250
Sulfate	mg/l	250
Boron	mg/l	1.5

3. The pH of reclaimed water shall at all times be within the range 6.0 to 9.0.
4. Reclaimed water shall not contain trace constituents or other substances in concentrations exceeding the limits contained in the current edition of the California Department of Health Services Drinking Water Standards.
5. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, California Administrative Code, or subsequent revisions.
6. Reclaimed water shall not cause the nitrogen content in the receiving ground water to exceed the objectives in the Water Quality Control Plan.
7. Reclaimed water, used for agricultural supply, shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use.

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 an 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 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

5. Reclaimed water used as a source of supply in a landscape 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.

6. 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.

7. Reclaimed water uses shall meet the requirements specified in the "Guidelines for Use of Reclaimed

**Water" issued by the State Department of Health
Services.**

8. 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 provided the discharge meets the requirements contained in a National Pollutant Discharge Elimination System Permit issued to the County Sanitation Districts of Los Angeles County (Long Beach Water Reclamation Plant).

9. 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.
10. 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 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. Reclaimed water use or disposal shall not result in earth movement in geologically unstable areas.
5. Adequate facilities shall be provided to protect the sewage treatment and reclamation facilities from damage by storm flows and runoff.

6. Adequate freeboard shall be maintained in reclaimed water storage pond to ensure that direct rainfall will not cause overtopping.
7. Neither treatment of waste nor any reclaimed water use or disposal shall cause pollution or nuisance.
8. Water reclamation and reuse or disposal shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.
9. Reclaimed water use or disposal shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving ground waters.
10. 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.
11. 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 these waste treatment and reclamation facilities, the Reclaimer 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 limit, 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. 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.
11. The Reclaimer shall provide to each user of reclaimed water from Long Beach 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.

12. 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.
13. The Reclaimer shall submit to the Board within 60 days of the adoption of this Order, a fail-safe procedure for approval by the Executive Officer.
14. Order No. 79-131 adopted by this Board on July 23, 1979, 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 April 27, 1987.



ROBERT P. GHIRELLI, D.Env.
Executive Officer

GK/

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

MONITORING AND REPORTING PROGRAM NO. 6184
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Long Beach Water Reclamation Plant)
(File No. 69-80)

The Reclaimer shall implement this monitoring program on 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 August 15, 1987.

By March 1 of each year, 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.

Values obtained for the NPDES monitoring report during periods of discharge to surface waters may be reported here in lieu of duplicate testing, if representative. However, non-NPDES self-monitoring reports shall be submitted separately from the NPDES monitoring reports.

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:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Turbidity ¹	NTU	continuous	-----
Total flow ²	gallon	continuous	-----
Coliform group ³	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
Arsenic	mg/l	24-hr composite	quarterly
Barium	mg/l	24-hr composite	quarterly
Cadmium	mg/l	24-hr composite	quarterly
Chromium	mg/l	24-hr composite	quarterly
Lead	mg/l	24-hr composite	quarterly
Mercury	mg/l	24-hr composite	quarterly
Selenium	mg/l	24-hr composite	quarterly
Silver	mg/l	24-hr composite	quarterly
Cyanide	mg/l	24-hr composite	quarterly
Nitrate	mg/l	24-hr composite	quarterly

¹Required only for applications having a turbidity limit. The average value recorded each day and amount of time that 5 NTU was exceeded each day shall be reported. Turbidity samples may be obtained anywhere in the treatment process subsequent to the filtration procedure.

²Shall report the daily volume of reclaimed water and the monthly volume used at each site.

³Samples 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.

Fluoride	mg/l	24-hr composite	quarterly
Radioactivity	pCi/l	24-hr composite	quarterly
Total identifiable chlorinated hydrocarbon	ug/l	grab	quarterly
Priority Pollutants	ug/l	grab	semi-annually

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", 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 corporations, 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)"

Ordered by Robert P. Ghirelli
Executive Officer

April 27, 1987
Date