Board File

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

ORDER NO. 80-34

ORIGINAL

WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF SAN BUENAVENTURA
(Ventura Water Renovation Facility)
(File No. 57-68)

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

1. City of San Buenaventura uses reclaimed wastewater from the Ventura Water Renovation Facility under requirements contained in Order No. 77-91, adopted by this Board on June 27, 1977.

2. City of San Buenaventura operates the Ventura Water Renovation Facility, located at 1400 Spinnaker Drive, Ventura, California. The facility has a design capacity of 14 million gallons per day (mgd). The average flow in 1979 was 7.52 mgd. Treatment consists of primary sedimentation, activated sludge, biofiltration, secondary sedimentation, filtration and chlorination. A portion of the treated wastewater is reclaimed.

3. Reclaimed water from this facility is used for recreational impoundments and turf irrigation at City of San Buenaventura's Olivas Park Golf Course and Marina Park, and for landscape irrigation at the Ventura Water Renovation Facility and the Ventura Port District's properties.

4. City of San Buenaventura discharges aerobic digested sludge by spreading and disking into soil, on a 32-acre parcel of city-owned land. This selected site is located east of and adjacent to the treatment plant in Section 23, T2N, R23W, S.B.B.& M., within Oxnard Hydrologic Subarea. Drainage from the site is to Santa Clara River Tidal Prism.

5. The treated wastewater may also be discharged directly to Santa Clara River, within the tidal prism, under separate waste discharge requirements and National Pollutant Discharge Elimination System Permit (NPDES Permit No. CA0053651).

6. City of San Buenaventura is expanding the use of filtered treated wastewater to include irrigation at Buenaventura Golf Course, and is constructing new chlorination facilities and a new pipeline along Olivas Park Drive to transport reclaimed water to Buenaventura Golf Course. The City proposes to supply irrigation water for agricultural operations along the route of the new pipeline. The reclaimed water facilities are scheduled to be completed by 1981. The reclaimed water may also be used for soil compaction and dust control.

6/24/80
Revised 7/15/80
7/30/80

7. Olivas Park Golf Course is located in Sections 23 and 24, T2N, R23W, S.B.B. & M., overlying the Mound Groundwater Basin. Buenaventura Golf Course is located in Section 20, T2N, R22W, S.B.B. & M., overlying the Oxnard Plain Groundwater Basin. Cropland receiving reclaimed water may overlie either of the above groundwater basins within Oxnard Hydrologic Subarea.

8. Analyses of water samples obtained from shallow wells and surface drainage ditches in the area indicate that ground waters of the shallow semiperched zone are of very poor quality and are not beneficially used in any significant amount. The use of reclaimed water meeting the requirements specified hereinbelow will not cause any further deterioration in the quality of these ground waters.

9. The Board adopted a revised Water Quality Control Plan for Santa Clara River Basin on March 27, 1978. The Plan contains water quality objectives for ground waters of Oxnard Hydrologic Subarea. The requirements contained in this Order are necessary to assist in meeting those objectives and protecting these ground waters for domestic and agricultural purposes, and for potential industrial process supply use.

10. The State Department of Health Services has not yet adopted criteria for the use of digested sewage sludge, but has drafted tentative guidelines for such use. The tentative guidelines specify that if liquid sludge is applied and mixed into the soil, there should be no public use of the land for one year and drainage from the lands must be controlled. The tentative guidelines further recommend that sewage sludge used on food crops must ber sterilized by a method equivalent to that of heat drying except under special study conditions approved by the Department of Health Services.

11. 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 if it determines such action to be necessary to protect the public health, safety, or welfare, shall 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 conform to the statewide reclamation criteria.

12. The use of reclaimed water from the Ventura Wastewater Renovation Facility for landscape and agricultural irrigation and impoundments could affect the public health, safety, or welfare; requirements for such uses are therefore necessary in accordance with Section 13523 of the Water Code.

13. The discharger prepared a Sanitation Report on the Use of Secondary Treated Sewage Water for Golf Course Irrigation. That report found that no lasting or significant adverse effects on the environment are expected as a result of the discharge covered by this Order.

14. The discharger prepared a final environmental impact report (EIR) in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.).

15. The project as reported in the EIR is not expected to produce any significant environmental effect. The project deals with installation of irrigation pipelines and modification of the existing plant by installing dechlorination facilities, thereby enchancing the quality of effluent from the treatment plant. Currently, part of the secondary treated wastewater from Ventura Water Reclamation Facility is discharged to Santa Clara River tidal prism and lagoon (under separate requirements of the Board). That discharge has been found to enhance the quality of the water in the lagoon and the wildlife habitat of that area.

The Board has notified the discharger and interested agencies and persons of its intent to prescribe 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 City of San Buenaventura shall comply with the following:

A. Effluent 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:

Constituent	Units	Discharge Limitations 30 - Day Average	Maximum
Total dissolved solids	mg/l	-----	3,000
Chloride	mg/l	-----	500
Sulfate	mg/l	-----	1,000
BOD_5 20°C	mg/l	20	60
Suspended solids	mg/l	50	150
Settleable solids	ml/l	0.1	0.3

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 heavy metals, arsenic, or cyanide in concentrations exceeding the limits contained in the current California 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.

B. Specifications for Use of Reclaimed Water

1. Reclaimed water used for surface or spray irrigation of fodder, fiber, and seed crops shall have a level of quality no less than that of a primary effluent.

Primary effluent is the effluent from a wastewater treatment process which provides removal of sewage solids so that it contains not more than 0.5 milliliter per liter per hour of settleable solids as determined by an approved laboratory method.

2. 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.

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

3. Reclaimed water used as a source of supply in a landscape impoundment (body of reclaimed water which is used for aesthetic enjoyment or which otherwise serves a function not intended to include public contact) 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.

4. Exceptions to the quality requirements for reclaimed water used for irrigation of food crops may be considered on an individual case basis where the reclaimed water is to be used to irrigate a food crop which must undergo extensive commercial, physical or chemical processing sufficient to destroy pathogenic agents before it is suitable for human consumption.

5. Reclaimed water used for the irrigation of pasture to which milking cows or goats have access 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 used for the irrigation of parks, playgrounds, schoolyards, 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.

7. Reclaimed water used for irrigation shall not be allowed to run off into recreational lakes unless it meets the criteria for such lakes.

8. Reclaimed water used as a source of supply in a nonrestricted recreational impoundment (body of reclaimed water in which no limitations are imposed on body-contact water sport activities) 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.

9. Reclaimed water used as a source of supply in a restricted recreational impoundment (A body of reclaimed water in which recreation is limited to fishing, boating, and other non-body-contact water recreation activities) 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.

10. Reclaimed water shall be retained on the area(s) 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, of secondary quality or better, from peripheral areas shall not be considered a violation of the Order provided the discharge meets the requirements contained in a National Pollutant Discharge Elimination Permit for the City of San Buenaventura (San Buenaventura Water Renovation Facility).

11. 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 requirements contained herein are applicable to these uses.

C. Requirements for Sludge Disposal

1. Wastes discharged to land shall be limited to digested sewage sludge only.

2. Wastes discharged shall not be permitted to escape as surface flow from areas of application or to enter creeks, drainage ditches or watercourses.

3. Wastes shall not be permitted to pond on the property or be placed in ponded water; wastes shall be spread and immediately disked into the topsoil, as proposed.

4. Erosion of deposited materials by surface flow shall be prevented.

5. Storm runoff, except rain falling naturally on the site, shall be diverted around this site.

6. Wastes shall be discharged only at the proposed site and only on land owned or controlled by the discharger.

7. Water used for irrigation shall not be allowed or escape from the sludge spreading areas as surface runoff.

8. No part of suldge spreading areas shall be closer than 100 feet to any water well or stream channel or watercourse.

9. There shall be no public use of the land on which sludge has been placed for one year unless the sludge has been heat-dried equivalent to sterilization or has been chemically oxidized.

10. Sludge shall not be applied onto lands within 100 feet of any low pressure water line which domestic water is derived.

D. General Requirements

1. The discharge 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 storage capacities or other means shall be provided so that in the event of plant upset or outage due to power failure or other cause discharge of raw or inadequately treated sewage does not occur.

4. Reclaimed water shall not be sprayed in geologically unstable areas or so as to cause earth movement.

5. Reclamation facilities shall be protected from 100-year floods.

6. Adequate freeboard shall be maintained in reclaimed water storage pond(s) to ensure that direct rainfall will not cause overtopping.

7. Neither treatment nor any use of wastewater shall cause pollution or nuisance.

8. The reclamation of wastes shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.

9. Reclaimed water shall not impact tastes, odors, color, foaming, or other objectionable characteristics to receiving groundwaters.

10. Reclaimed water which could affect receiving groundwaters shall not contain any substance in concentrations toxic to human, animal, or plant life.

11. Odors of waste origin shall not cause a nuisance.

E. Provisions

1. A copy of these specifications 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 control or ownership of land or waste treatment and reclamation facilities presently owned or controlled by City of San Buenaventura that agency shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.

3. City of San Buenaventura shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Programs as directed by the Executive Officer.

4. City of San Buenaventura shall submit to the Board within three months from the date of adoption of this Order a report demonstrating compliance with the requirements specified in Chapter 3, Division 4, Title 22, California Administrative Code.

5. City of San Buenaventura shall notify this Board by telephone within 24 hours of any adverse conditions as a result of the use of wastes from this facility; written confirmation shall follow within one (1) week.

6. The discharger shall notify Board staff by telephone immediately of any confirmed coliform counts that could cause a violation of the 7-day median limit, or that exceed the applicable maximum effluent limit. 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 taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

7. 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, Division 14, Section 2455 and 2460.

8. Order No. 77-91, adopted by this Board on June 27, 1977, is hereby rescinded.

I, Raymond M. Hertel, 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 July 28, 1980.

Raymond M Hertel

RAYMOND M. HERTEL, Executive Officer

RMH:mp

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. 6190
FOR
WATER RECLAMATION

CITY OF SAN BUENAVENTURA
(Ventura Water Renovation Facility)
(File No. 57-68)

City of San Buenaventura shall implement this monitoring program within 30 days following date of adoption of this Order.

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

REPORTING PERIOD	REPORT DUE
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15

If no water was delivered for reuse on any day, the report shall so state.

Each monitoring report must affirm in writing that:

> All analyses were conducted at a laboratory certified for such analyses by the State Department of Health Services and in accordance with current EPA guideline procedures, or as specified in the Monitoring Program.

For any analyses performed for which no procedure is specified in the EPA guidelines or in this Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

I. 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:

Constituent	Unit	Sample	of Analysis
Flow	mgd	continuous[1]	----------
Total chlorine residual	mg/l	continuous[2]	----------
Turbidity	NTU	continuous[3]	----------
BOD_5 20° C	mg/l	grab	daily
Suspended solids	mg/l	grab	monthly
Coliform group[4]	MPN/100 ml	grab	daily
pH	pH units	grab	daily
Settleable solids	ml/l	grab	daily
Total dissolved solids	mg/l	grab	monthly
Chloride	mg/l	grab	monthly
Sulfate	mg/l	grab	monthly
Boron	mg/l	grab	monthly
Radioactivity	pCi/l	grab	quarterly
Total nitrogen	mg/l	grab	quarterly

II. Hauling

In the event wastes are hauled to a different disposal site, the name and address of the hauler of the waste shall be reported in each quarterly monitoring report along with quantities hauled during the quarter and the location of the final point of disposal. If no wastes are hauled during the reporting period a statement to that effect shall be submitted.

1/ The total amount reclaimed each day shall be reported. In addition, the monthly quantity of reclaimed wastewater delivered to each user and his use(s) of the water shall also be reported.

2/ The maximum value recorded each day shall be reported.

3/ Required 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.

4/ 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 requirements specified for all uses during periods of multiple use, unless separate coliform analyses are obtained at each particular point of use.

III. Reclaimed Wastewater Reporting

1. Within 30 days of adoption of this Order City of San Buenaventura shall submit to this Board a technical report concerning the location and complete description of each existing and/or proposed coliform sampling station, together with data to support the conclusion that said station is representative of entire flow at that point in the treatment process.

2. City of San Buenaventura shall submit to the Board within three months from the date of adoption of this Order a report describing contingency plans to be implemented in the event the treated effluent does not meet reclaimed water requirements at any time.

3. Within 30 days after adoption of this Order, the City of San Buenaventura shall submit to this Board a report which:

   (a) certifies that supervising and operating personnel at the Ventura Water Renovation Facility possess certificates of appropriate grade, as required; or

   (b) contains details and a reasonable time schedule for obtaining such certificates.

4. Each quarterly monitoring report shall include:

   A. A statement that all reclaimed water was used only as specified, and for uses specified, in requirements during the quarter.

   B. Estimated average population served during the quarter.

   C. Approximate acreage receiving reclaimed water.

   D. The results of the reclaimed water monitoring.

   E. Records of operational problems, plant and equipment breakdowns, and diversions to emergency storage or disposal.

   F. All corrective or preventive action taken.

   G. Name and location of each user of reclaimed water and to what use(s) the reclaimed water is put (if there are no changes from the previous monitoring report, a statement to that effect shall suffice.

5. The attached General Monitoring and Reporting Provisions shall be applicable to this Program.

6. If all or a portion of the water was not reclaimed during any month because of failure to meet requirements, the report shall so state and certify that the contingency plans, in accordance with item III-2 of this Monitoring Program, were implemented.

7. If no water delivered for reuse during any month, the report shall so state.

IV

Sludge Disposal Reporting

Each report shall contain the following information:

1. If any wastes are transferred for disposal elsewhere, the total volume of wastes hauled during the reporting period; also the type of wastes, name of hauler, date(s) of hauling, volume(s) hauled, and location of final disposal site(s).

2. A map or description of the areas where sludge was applied during the reporting period, including the quantity (gallons per acre per day) applied to each area.

3. A certification that all wastes deposited were in compliance with the Board's requirements and that no wastes have been deposited outside of the boundaries of the site as specified in the Board's requirements.

V. Demonstration of Compliance with 30-day Average Limitations

For parameters where both 30-day average and maximum limits are specified but where the monitoring frequency is less than four times a month, the following procedure shall apply. Initially, beginning not later than the first week of the second month after the adoption of this program, a representative sample of reclaimed water shall be obtained at least once per week for at least four consecutive weeks and until compliance with the 30-day average limit has been demonstrated. Once that compliance has been demonstrated, sampling and analyses shall revert to the frequency specified in the table above. However, if future analyses of two successive samples yield results greater than 90% of the maximum limit for a parameter, the sampling frequency for that parameter shall be increased (within one week of receiving the laboratory result on the second sample) to a minimum of once weekly until at least four consecutive weekly samples have been obtained and compliance with the 30-day average limit has been demonstrated again and a program which ensures future compliance with the 30-day average limit has been set forth for the approval of the Executive Officer.

Ordered by Raymond M. Hertel
Executive Officer
AUG 4 1980
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

GENERAL MONITORING AND REPORTING PROVISIONS

1. 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.

2. All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health.

3. Effluent samples shall be taken downstream of any addition to the treatment works and prior to mixing with the receiving waters.

4. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

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

6. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period. The volume of each individual sample is 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.

7. 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 submit a timetable for correction.

8. By January 30 of each year, the discharger 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 discharger 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 waste discharge requirements.

9. The discharger shall maintain all sampling and analytical results, including strip charts: date, exact place, and time of sampling; date 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 of when requested by the Board.

10. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with waste discharge requirements and, where applicable, shall include results of receiving water observations.

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

12. Each report shall contain the following completed declaration:

    " I declare under penalty of perjury that the foregoing is true correct.

    Executed on the _____ day of _____ at _____.

    _____(Signature)

    _____(Title)"

13. The discharger shall mail a copy of each monitoring report to the following:

    California Regional Water Quality
    Control Board - Los Angeles Region
    107 South Broadway, Room 4027
    Los Angeles, CA 90012

    ATTN: Executive Officer

14. If no flow occurred (or no waste was deposited) during the reporting period, the report shall so state.

15. These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region. Records or reports which might disclose trade secrets, etc., may be excluded from this provision as provided in Section 13267 (b) of the Porter-Cologne Water Quality Control Act, if requested.