

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 90-016

WASTE DISCHARGE REQUIREMENTS
FOR
COACHELLA VALLEY WATER DISTRICT
PALM DESERT WASTEWATER RECLAMATION FACILITY
Northeast of Palm Desert - Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Coachella Valley Water District (hereinafter also referred to as the discharger), 85-820 Coachella Heights, P.O. Box 1058, Coachella, California 92236, verified as accurate the below updated information on December 7, 1989.
2. The discharger operates a sewage treatment facility that consists of an activated sludge treatment plant (that provides secondary level of treatment of the wastewater) and a tertiary wastewater treatment plant.
3. The secondary treatment plant has a total design flow of 10 million gallons-per-day (mgd) of wastewater and consists essentially of a grit chamber, 10 aeration basins, and 8 secondary clarifiers. Secondary sludge is treated in 4 aerobic digesters. Following treatment the sludge is mechanically dewatered by means of 2 belt filter presses.
4. The discharger is currently discharging an annual average daily flow of 6.60 mgd from the secondary treatment plant. About forty percent of this plant's effluent is further treated at the tertiary treatment plant; the remaining effluent is piped first to four cement lined holding basins and then to infiltration basins (10) for final disposal. The entire treatment facility, including the basins, are located within the E½ of the NW¼ of Section 15 and the N½ of the SW¼ of Section 15, T5S, R6E, SBB&M, as indicated on the attached site map.
5. The solids removed from the grit chamber are disposed of at an approved landfill. The discharger has contracted the service of Pima Gro Company to haul away the treated secondary sludge for land application at sites located in Riverside County. Pima Gro Company performs this service under waste discharge requirements prescribed by the Regional Board and provides the Regional Board office with monthly reports on the results of sludge monitoring and analyses.
6. The discharger reports that part of the secondary treatment effluent is also used for on-site irrigation and plant maintenance.

*Superseded
by
90-038
5/16/90*

7. The purpose of the tertiary treatment process is to treat the secondary effluent and reclaim it for the irrigation of adjacent (off-site) golf courses. The tertiary treatment consists of coagulation (using alum), flocculation, dual media filtration (sand and anthracite). The effluent is chlorinated and the chlorinated tertiary effluent is piped directly to holding basins located on the golf courses. The tertiary treatment plant has a design capacity of 10 mgd.
8. The Water Quality Control Plan for the Colorado River Basin Region of California designates the beneficial uses of ground and surface waters in this Region.
9. The beneficial uses of ground waters in the Coachella Hydrologic Subunit are:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
 - c. Agricultural supply (AGR)
10. The discharger reports that there are no water wells within 500 feet of the on-site infiltration basins.
11. The discharger reports further that currently no industrial wastewaters are being discharged to the wastewater treatment facility.
12. This discharge has been subject to waste discharge requirements adopted in Board Order No. 86-077.
13. The purpose of this Order is to update waste discharge requirements adopted in Board Order No. 86-077.
14. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.
15. The Board in a public meeting heard and considered all comments pertaining to the existing discharge.
16. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Discharge Specifications

1. Representative samples of secondary treatment plant effluent discharged to any holding and/or infiltration basin shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	30-Day Arithmetic Mean Discharge <u>Rate</u>	7-Day Arithmetic Mean Discharge <u>Rate</u>
20°C BOD ₅	mg/l	20	30
Suspended Solids	mg/l	20	30
Settleable Matter	ml/l	0.3	0.5

2. Representative samples of wastewater contained in holding and/or infiltration basins shall also not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	30-Day Arithmetic Means Discharge <u>Rate</u>	7-Day Arithmetic Mean Discharge <u>Rate</u>
Total Dissolved Solids	mg/l	450	500
Sulfate (SO ₄)	mg/l	70	80
Chloride (Cl)	mg/l	70	80
Fluoride (F)	mg/l	1.2	1.3

3. Tertiary treated effluent directly reused shall conform to the following:

a. Reclaimed water, used for the irrigation of golf courses and landscapes where the public has access or exposure, shall be at all times an adequately disinfected, oxidized, coagulated, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability.

(1) 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 maximum number of coliform organisms does not exceed 23 per 100 milliliters in any sample.

(2) 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. The wastewater shall be considered adequately filtered if 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.

- b. There shall be no direct discharge of reclaimed wastewater into any on-site domestic or irrigation supply well as a result of reclaimed wastewater irrigation of golf courses and landscape areas.
 - c. Coachella Valley Water District shall not deliver reclaimed wastewater for reuse to those users who, by reason of their operation practices, cause nuisances associated with wastewater or otherwise contribute to the violation of the requirements of this Board Order.
4. Infiltration facilities shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity.
 5. A freeboard depth of at least two feet shall be maintained in each infiltration basin and holding basin.
 6. Treated or untreated sludge, or similar solid waste materials shall be disposed as described in Finding No. 5 of this Board Order, or at locations approved by the Executive Officer.
 7. Wastes, including windblown spray, shall be strictly confined to the lands specifically designated for the disposal operation, and irrigation practices shall be so managed that runoff of effluent from the irrigated areas does not occur at any time.

B. Pretreatment Provisions

In the event that industrial wastewaters are being discharged to the wastewater treatment facility then:

1. The discharger shall develop, implement and maintain an industrial pretreatment program approved by the Regional Board Executive Officer.
2. The discharger shall maintain an adequate revenue program and enforce prohibitions against any applicable pretreatment standards approved by the Executive Officer.
3. The discharger shall provide the Regional Board office with an annual report describing the pretreatment program activities over the previous 12-month period. The report shall be transmitted to the Regional Board office no later than January 31 of each year and include:
 - a. A summary of actions taken by the discharger which ensures industrial-user compliance;
 - b. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and
 - c. The name and address of each user that received a revised discharge limit.

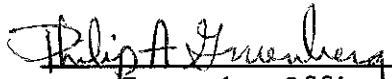
4. The Regional Board retains the right to take legal action against an industrial user and/or the discharger where a user fails to meet the approved applicable pretreatment standards.

C. Other

1. The treatment and discharge of wastes shall not cause pollution or a nuisance as defined in Division 7 of the California Water Code.
2. Adequate protective works shall be provided to assure that a flood which would be expected to occur on a frequency of once in a 100-year period would not erode or otherwise render portions of the treatment and discharge facilities inoperable.
3. This Board Order includes the attached "Monitoring and Reporting Program No. 90-016" and future revisions thereto, as specified by the Executive Officer.
4. The discharger shall provide the following information regarding off-site use of tertiary effluent:
 - a. Name and location of the golf courses/landscape areas being irrigated.
 - b. Name of person, company, or agency responsible for the operation and maintenance of the irrigation system.
 - c. Quantity and quality of the tertiary effluent being provided to individual customers.
 - d. The discharger shall immediately notify the Executive Officer of any changes regarding items 4.a., 4.b., and 4.c.
5. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
6. The discharger's plant shall be supervised and operated by persons possessing certification of an appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23, California Code of Regulations.
7. The discharger shall provide a report to the Regional Board when it determines that the treatment plants are operating at 80 percent of the design capacities specified in Findings No. 3 and 7 of this Board Order. The report should indicate what steps, if any, the discharger intends to take, to provide for expected wastewater treatment capacities necessary, when the plants reach their design capacities.
9. The discharger shall not accept waste in excess of the design capacity of the secondary treatment plant.

IT IS FURTHER ORDERED that Board Order No. 86-077 be superseded by this Order.

I, Philip A. Gruenberg, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on March 14, 1990.


Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 90-016
FOR
COACHELLA VALLEY WATER DISTRICT
PALM DESERT WASTEWATER RECLAMATION FACILITY
Northeast of Palm Desert - Riverside County

Location of Discharge: E $\frac{1}{2}$, NW $\frac{1}{4}$, Section 15, and the N $\frac{1}{2}$, SW $\frac{1}{4}$, Section 15, T5S, R6E,
SBB&M

A. EFFLUENT MONITORING

Secondary Effluent¹ discharged to any holding and/or infiltration basin shall be monitored for the following:

<u>Constituents</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD ₅	mg/l	24-Hr. Composite	Weekly
Suspended Solids	mg/l	24-Hr. Composite	Weekly
Settleable Matter	ml/l	Grab at Peak Flow	Weekly
Flow (Total Plant Effluent)	MGD	Flow measurement	Daily ²

Wastewater contained in holding and/or infiltration basins shall be monitored for the following:

Total Dissolved Solids	mg/l	Grab	Quarterly
Sulfate (SO ₄)	mg/l	Grab	Quarterly
Chloride (Cl)	mg/l	Grab	Quarterly
Fluoride (F)	mg/l	Grab	Quarterly
Total Nitrogen (N) ³	mg/l	Grab	Quarterly

¹ Effluent from activated sludge treatment plant.

² Reported for each day with average monthly flow calculated.

³ Total Nitrogen as the summation of nitrate, nitrite, ammonia and organic nitrogen.

B. TERTIARY EFFLUENT MONITORING

Coachella Valley Water District shall monitor the tertiary effluent⁴ being supplied for golf courses/landscape irrigation as follows:

<u>Item</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Coliform Organism	MPN/100 ml	Grab	Daily ⁵
Volume of waste-water used for irrigation at each location	Gallons/day	Flow Measurement	Daily ⁶
Turbidity	-	Continuous	Meter Reading ⁷
Chlorine Residual	mg/l	Grab at Peak Flow	Daily

The discharger shall provide the location of all golf course sites being irrigated and the name of person, company or agency responsible for the irrigation at individual sites.

C. SLUDGE MONITORING

The discharger shall report quarterly on the quantity, location, and method of disposal of all sludge and similar solid materials being handled at the wastewater treatment plant facility.

⁴ Effluent from tertiary treatment plant after chlorination.

⁵ To be taken when wastewater flow and characteristics are most demanding on the treatment and chlorination facilities. The sample may be taken at any point in the treatment process.

⁶ Reported for each day with average monthly flow calculated.

⁷ Reported for each day with average daily turbidity calculated.

D. REPORTING

Monitoring reports shall be submitted to the Regional Board as follows:

Daily and Weekly data - reported monthly by the 15th day of the following month.

Quarterly report - by January 15, April 15, July 15, and October 15 of each year.

Forward monitoring reports to:

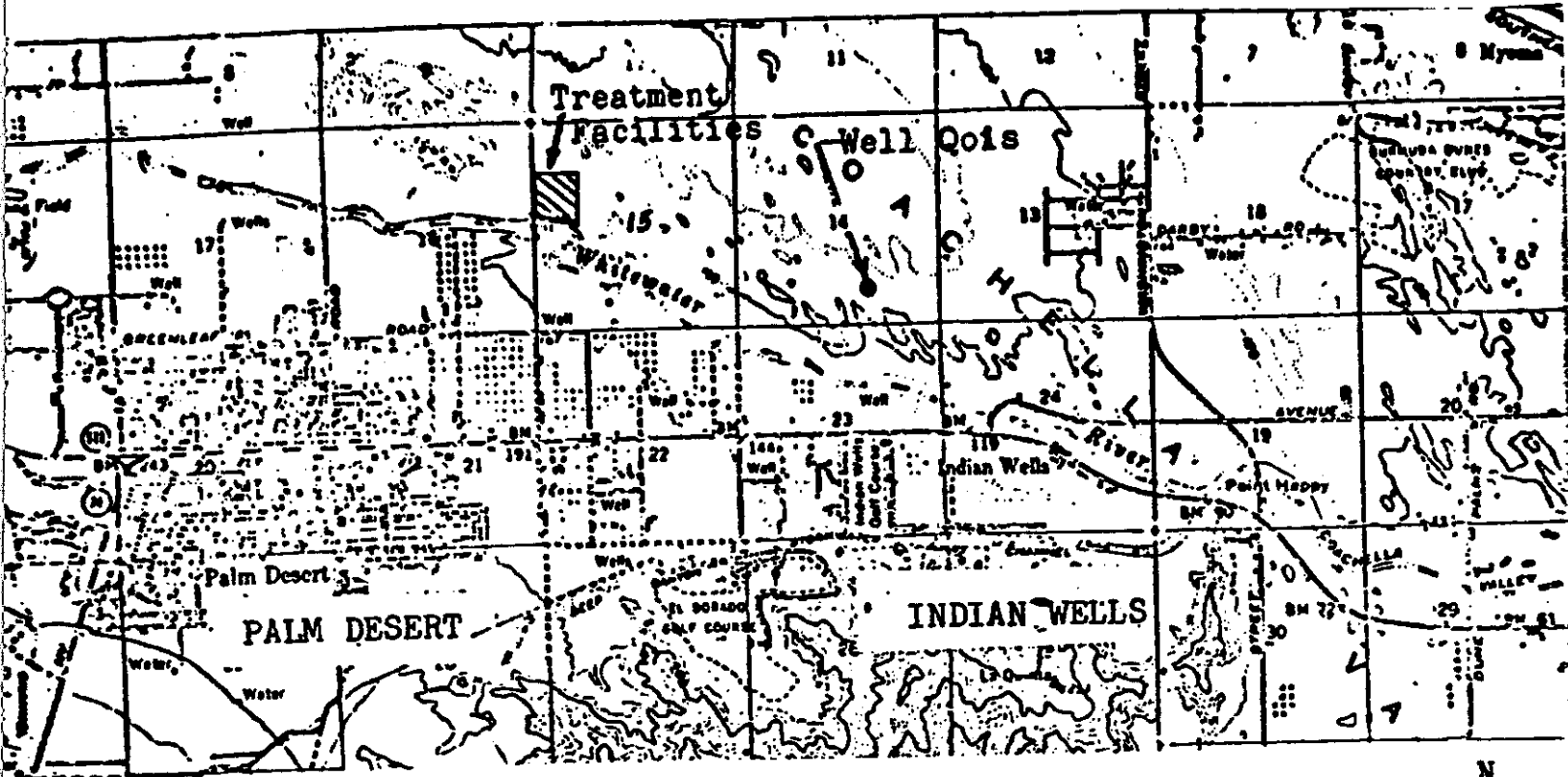
California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

ORDERED BY:

Philip A. Greenberg
Executive Officer

March 14, 1990

Date



SITE MAP

COACHELLA VALLEY WATER DISTRICT
PALM DESERT WASTEWATER RECLAMATION PLANT
Northeast of Palm Desert - Riverside County

Facility and Discharge Location:

$E\frac{1}{2}$, $NW\frac{1}{4}$, Section 15 and the $N\frac{1}{2}$, $SW\frac{1}{4}$, Section 15 T5S, R6E, SBB&M
USGS Palm Desert 15' Topographic Map



Scale:
1" = 1 mil