

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 90-038

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, submitted a report of waste discharge on February 28, 1990.
2. The discharger currently operates a sewage treatment facility that consists of an activated sludge treatment plant (that provides a secondary level of treatment of the wastewater) and a tertiary wastewater treatment plant.
3. The discharger has proposed to increase the design treatment capacity of the secondary treatment plant from 10 million gallons-per-day(mgd) to 18 mgd of wastewater. The expanded plant will consist mainly of a grit chamber, 16 aeration basins and 14 secondary clarifiers. Secondary sludge will be treated in 4 aerobic digesters. Following treatment the sludge will be mechanically dewatered by means of 2 belt filter presses.
4. The discharger has proposed to discharge an annual average daily flow of 8.0 mgd from the secondary treatment plant. About forty percent of this plant's effluent will be further treated at the tertiary treatment plant; the remaining effluent will be 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 E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 15 and the N $\frac{1}{2}$ of the SW $\frac{1}{4}$ of Section 15, T5S, R6E, SBB&M, as indicated on the attached site map.
5. The solids removed from the grit chamber will be 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 such 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 plant effluent will also be used for on-site irrigation and plant maintenance.

*Superseded
by 93-014
3/31/93*

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, and 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 an adequate current design treatment 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. The discharge from the unexpanded facility has been subject to waste discharge requirements adopted in Board Order No. 90-016.
13. The Board has notified the discharger and all known interested agencies and persons of its intent to prescribe waste discharge requirements for this proposed discharge.
14. The Board in a public meeting heard and considered all comments pertaining to this discharge.
15. The Coachella Valley Water District adopted a Negative Declaration (State Clearinghouse No. 89020260) on April 26, 1988. The Negative Declaration indicates that this project will not have a significant adverse effect on the quality of contiguous ground or surface waters.

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

A. 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 <u>Discharge Rate</u>	7-Day Arithmetic Mean <u>Discharge 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 Mean <u>Discharge Rate</u>	7-Day Arithmetic Mean <u>Discharge Rate</u>
Total Dissolved Solids	mg/l	450	500
Sulfate (SO ₄)	mg/l	70	80
Chloride (Cl)	mg/l	70	80
Fluoride	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. The 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 minimum depth of freeboard of two (2) feet shall be maintained at all times in infiltration basins and holding basins.
 - 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 anytime.

B. Pretreatment

In the event that significant 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's 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.

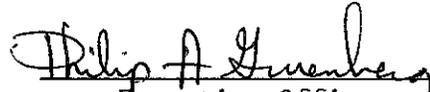
C. Other

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(1) and 13050(m) of 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. The discharger shall comply with "Monitoring and Reporting Program No. "90-038", and future revisions thereto, as specified by the Regional Board's 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 Subchapter 14, Chapter 3, 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. 90-016 be superseded by this Board 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 May 16, 1990.


Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 90-038
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>Constituent</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:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
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

¹Effluent from activated sludge treatment plant.

²Reported for each day with average monthly flow calculated.

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

B. TERTIARY EFFLUENT MONITORING

The 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 wastewater 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 the 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.

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.

⁴Effluent from tertiary treatment plant after chlorination.

⁵To 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.

⁶Reported for each day with average monthly flow calculated.

⁷Reported for each day with average daily turbidity calculated.

Forward monitoring reports to:

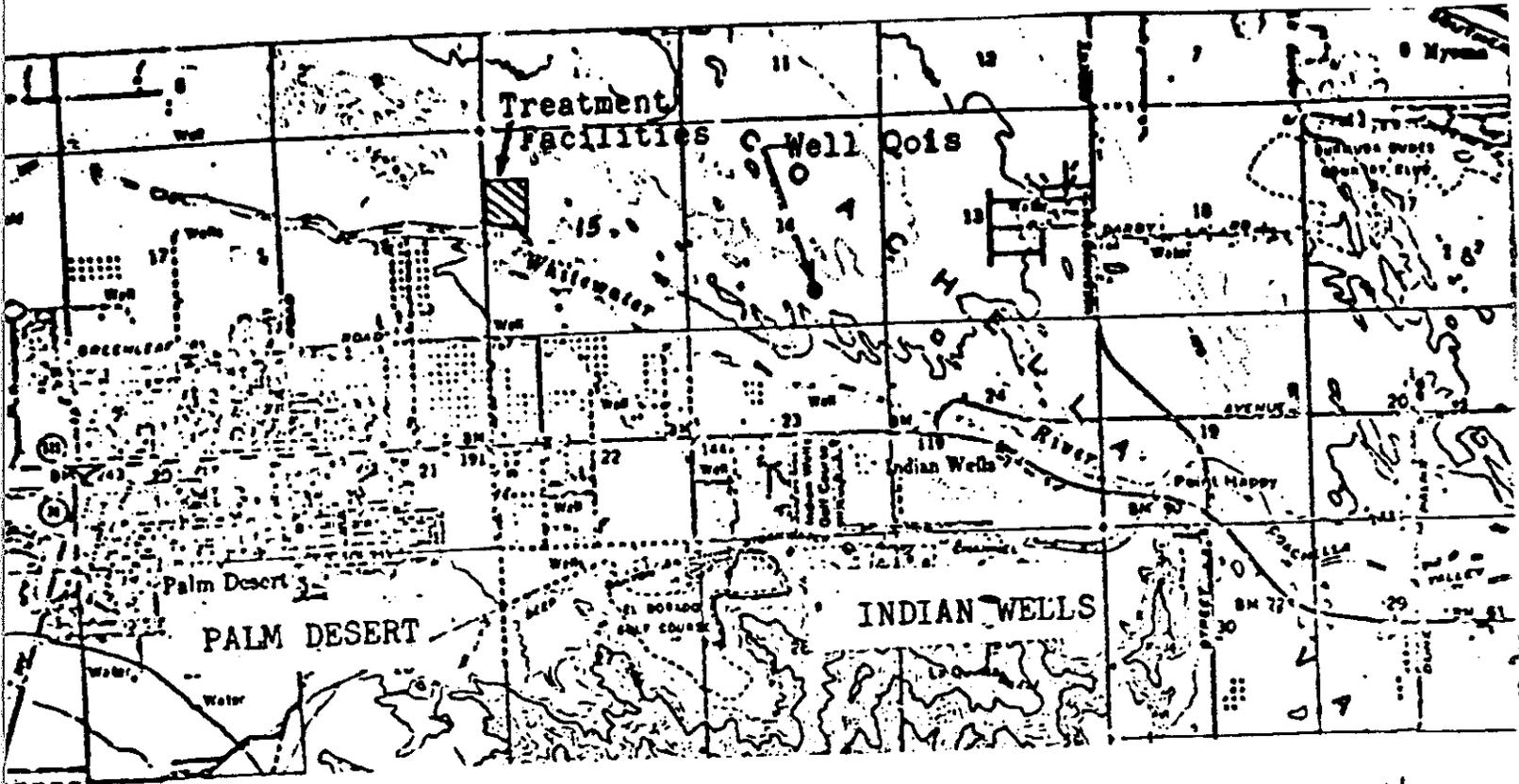
California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

ORDERED BY:


Executive Officer

May 16, 1990

Date



SITE MAP

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

Scale:
1"=1 Mile

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

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