CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER NO. 92-006 NPDES NO. CA0105031

WASTE DISCHARGE REQUIREMENTS
AND NPDES PERMIT FOR
COACHELLA SANITARY DISTRICT
WASTEWATER TREATMENT PLANT NO. 2
Coachella - Riverside County

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

- Coachella Sanitary District (hereinafter also referred to as the discharger), 1515 Sixth Street, Coachella, California, 92236, submitted an NPDES application for renewal of permit to discharge, dated August 28, 1991.
- 2. The discharger proposes to discharge an annual average flow of 0.5 million gallons-per-day (mgd) of treated effluent from Wastewater Treatment Plant No. 2 to the Coachella Valley Storm Water Channel. The treatment plant and outfall pipe are located in the NW½ of NW½ of Section 15, T6S, R8E, SBB&M, as shown on the attached site map. The treatment plant consists primarily of two waste stabilization basins (soil cemented earthen basins), and chlorination and dechlorination units. Each basin is fitted with five mechanical aerators. The plant has a design treatment capacity of 1.0 mgd. In addition, the plant has been designed so as not to have sludge wasting for at least twenty years.
- 3. The wastewater treated at this plant will be composed of sanitary wastewaters from the City of Coachella, the Thermal community and Jackson Street Annex area.
- 4. The discharger reports that no industrial wastewaters will be discharged to the treatment plant.
- 5. This discharge has been subject to waste discharge requirements adopted in Board Order No. 86-058 (NPDES NO. CA0105031) that permits discharge to Coachella Valley Stormwater Channel. However, the discharger reports that since the plant was built in 1988, it was put into operation for only two months in 1988. After that short start-up, the plant was shut down and has since not been in use. The discharger has proposed to start using the plant again in January 1992.
- 6. The discharger also operates at the same site, an activated sludge treatment plant (Treatment Plant No. 1) in accordance with Board Order No. 89-004 (NPDES NO. CA0104493).

Superseded Order# 97-041 by: Board Order# 5/28/97

1

- 7. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted on May 15, 1991 and designates the beneficial uses of ground and surface waters in this Region.
- 8. The beneficial uses of waters in the Coachella Valley Storm Water Channel are:
 - a. Fresh Water Replenishment of Salton Sea (FRSH)
 - b. Water Contact Recreation (REC I)
 - c. Noncontact Water Recreation (REC II)
 - d. Warm Water Habitat (WARM)
 - e. Wildlife Habitat (WILD)
 - f. Preservation of Rare, Endangered or Threatened Species (RARE)
- 9. The purpose of this Board Order is to renew waste discharge requirements adopted in Board Order No. 86-058.
- 10. The issuance of waste discharge requirements for the discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) Division 13, of the Public Resources Code pursuant to Section 13389 of the California Water Code.
- 11. The Board has notified the discharger, and all known interested agencies and persons of its intent to prescribe waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 12. The Board in a public meeting heard and considered all comments pertaining to this discharge.
- 13. This Board Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Clean Water Act, as amended, and shall become effective at the end of ten (10) days from the date of the hearing at which this Board Order was adopted by the Regional Board, provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and the regulations and guidelines adopted thereunder, shall comply with the following specifications:

A. Effluent Limitations

1. Wastewater discharged to the Coachella Valley Storm Water Channel shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	30-Day Arithmetic Mean <u>Discharge Rate¹</u>	7-Day Arithmetic Mean <u>Discharge Rate²</u>
20°C BOD ₅	mg/l	45	65
Suspended Solids	mg/l	95	-
Settleable Matter	m1/1	0.3	0.5

- 2. The 30-day average percent removal of the pollutant parameter ${\rm BOD}_5$ shall not be less than 65 percent.
- 3. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0.
- 4. Wastewater discharged to Coachella Valley Storm Water Channel shall not contain a total chlorine residual content greater than 0.2 mg/l as an instantaneous maximum, and 0.1 mg/l as a monthly average.
- 5. Wastewater at point of discharge to the Coachella Valley Storm Water Channel shall comply with the following bacterial objectives:

Based on a statistically sufficient number of samples (not less than five samples spaced equally over a 30-day period), the geometric mean of the indicated bacterial densities shall not exceed the following:

E. Coli 126 per 100 ml; or Enterococci 33 per 100 ml

No single sample shall exceed the following:

E. Coli 400 per 100 ml; or Enterococci 100 per 100 ml

B. Receiving Water Limitations

- 1. Wastewater discharged to the Coachella Valley Storm Water Channel shall not:
 - a. Depress the dissolved oxygen content of said channel below 5.0 mg/l. During periods when the channel's dissolved oxygen content is already below 5.0 mg/l, the discharge shall not cause any further depression.

¹30-Day Mean: The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

 $^{^{2}7\}text{-Day}$ Mean: The arithmetic mean of pollutant parameter values of samples collected in a period of 7 consecutive days.

- b. Cause presence of oil, grease, scum and deposition of objectionable solids (like sludge).
- c. Contain heavy metals, chemicals, pesticides, or other constituents in concentration which are toxic to or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life.
- 2. This discharge shall not cause a violation of any other applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act.

C. Prohibitions

- 1. The discharger shall not accept waste in excess of the design treatment capacity of the plant as specified in Finding No. 2 of this Board Order.
- 2. The discharger shall not discharge untreated wastewater to the Coachella Valley Storm Water Channel.
- 3. There shall be no acute toxicity in the treatment plant effluent being discharged to the Coachella Valley Storm Water Channel. Acute toxicity is defined as less than ninety percent survival, fifty percent of the time, and less than seventy percent survival, ten percent of the time, of standard test organisms in undiluted effluent in a 96-hour static or continous flow test.

D. Provisions

- 1. Neither the treatment nor the discharge of wastewater shall create pollution or nuisance as defined in Division 7 of the California Water Code.
- 2. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the wastewater treatment facility inoperable.
- 3. The discharger shall comply with "Monitoring and Reporting Program No. 92-006", and the attached Standard Provisions and future revisions thereto, as specified by the Regional Board's Executive Officer.
- 4. The discharger's facility shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Section 3680, Title 23, California Code of Regulations.
- 5. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
- 6. The discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is acceptable to the Regional Board's Executive Officer. Treated or untreated sludge or similar solid materials shall not be disposed at a new location without the prior approval of the Executive Officer.

- 7. Wastewater discharged to the Coachella Valley Storm Water Channel shall be monitored for toxicity using bioassays as specified in "Monitoring and Reporting Program No, 92-006" (attached).
- 8. If the discharge consistently exceeds the applicable chronic or acute toxicity limitation, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level.
- 9. The discharger shall provide a report to the Regional Board when it determines that the plant is operating at 80 percent of the design capacity specified in Finding No. 2. The report should indicate what steps, if any, the discharger intends to take to provide for expected wastewater treatment capacity necessary when the plant reaches design capacity.
- 10. The discharger shall implement acceptable operation and maintenance at the wastewater treatment plant so that needed repair and maintenance are performed in a timely manner.
- 11. In the event the discharger allows industries to discharge to the wastewater treatment plant, then the discharger shall do so by developing and implementing an approved Industrial Pretreatment Program in accordance with the applicable Federal Pretreatment Regulations in 40 CFR Part 403.
- 12. This order expires five (5) years from January 22,1992 and the discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations not later than 180 days in advance of such date, as an application for issuance of new waste discharge requirements.

IT IS FURTHER ORDERED that Board Order No. 86-058 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 <u>January 22</u>, <u>1992</u>.

Thilip A Gruenberg Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 92-006 FOR

COACHELLA SANITARY DISTRICT
WASTEWATER TREATMENT PLANT NO. 2
Coachella - Riverside County

Location of Discharge: NW_{4}^{1} , NW_{4}^{1} , Section 15, T6S, R8E, SBB&M

MONITORING

A. <u>EFFLUENT MONITORING</u>

Wastewater treatment plant effluent discharged to the Coachella Valley Stormwater Channel shall be monitored for constituents indicated below. A sampling station shall be established where representative samples of the effluent can be obtained.

Constituents	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>
Discharge to Stormwater Channel	MGD	Average Daily	Reported Monthly
Settleable Matter	m1/1	Grab at Peak Flow	Weekly
Suspended Solids	m1/1	24-Hr. Composite	Weekly
20°C BOD ₅	mg/l	24-Hr. Composite	Weekly
рН	pH Units	Grab at Peak Flow	$\mathtt{Daily}^\mathtt{l}$
Bacteria (E. Coli & Enteroco	MPN/100ml occi)	Grab at Peak Flow	Twice Per Week
Chlorine Residual	mg/l	Grab at Peak Flow	Daily
Total Dissolved Solids	mg/l	24-Hr. Composite	Quarterly
Bioassay (Toxicity Test)	tu _c	Composite (See	Quarterly Section on Chronic Toxicity Testing)

¹ Once per weekday.

B. <u>INFLUENT MONITORING</u>

The wastewater influent to the treatment facility shall be monitored weekly for 20°C BOD_{5} and suspended solids, using 24-hour composite samples.

C. <u>SLUDGE MONITORING</u>

The discharger shall report the quantity in tons/year of sludge removed (if any) from the waste stabilization basins and the method and location of disposal.

D. <u>OPERATION AND MAINTENANCE</u>

Activity

Reporting

To inspect and document any operational and yearly maintenance problems by reviewing each unit process.

E. <u>EFFLUENT CHRONIC TOXICITY TESTING</u>

The discharger shall conduct chronic toxicity testing on the treatment plant effluent as follows:

Test			Minimum	
	<u>Units</u>	Type of <u>Samples</u>	Frequency of <u>Test</u>	
Chronic Toxicity	tu _c	Composite	Quarterly	

The tests given below shall be used to measure chronic toxicity:

Critical Life Stage Toxicity Tests

<u>Species</u>	<u>Effect</u>	Test Duration <u>(Days)</u>	<u>Reference</u>
fathead minnow (<u>Pimephales</u> promelas)	larval survival and growth rate	7	Horning & Weber, 1989
water flea (<u>Ceriodaphnia</u> <u>dubia)</u>	survival; number of young	7	Horning & Weber, 1989
alga (<u>Selanastrum</u> <u>capricornutum</u>)	growth rate	4	Horning & Weber, 1989

Toxicity Test Reference: Horning W.B. and C.I. Weber (eds). 1989. Short term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organism. Second edition. U.S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

Initial screening shall be conducted using a minimum of three test species (as given above), to determine the most sensitive test organism for chronic toxicity testing. The initial screening process shall be conducted quarterly for a minimum period of one year. After the initial screening period, chronic toxicity testing may be limited to the most sensitive test species on an annual basis.

Dilution and control waters should be obtained from an unaffected area of the receiving waters. Standard dilution water should be used if the above source exhibits toxicity greater than 1.0 $\rm tu_{c}$. The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units (tu_c) where:

 $tu_c = 100/NOEL$

and the No Observed Effect Level (NOEL) is expressed as the maximum percent effluent or test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test (indicated above).

REPORTING

Monthly, bi-weekly, weekly and daily monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted by January 15 of the following year.

Submit monitoring reports to:

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

A copy of the Discharge Monitoring Report shall also be sent to:

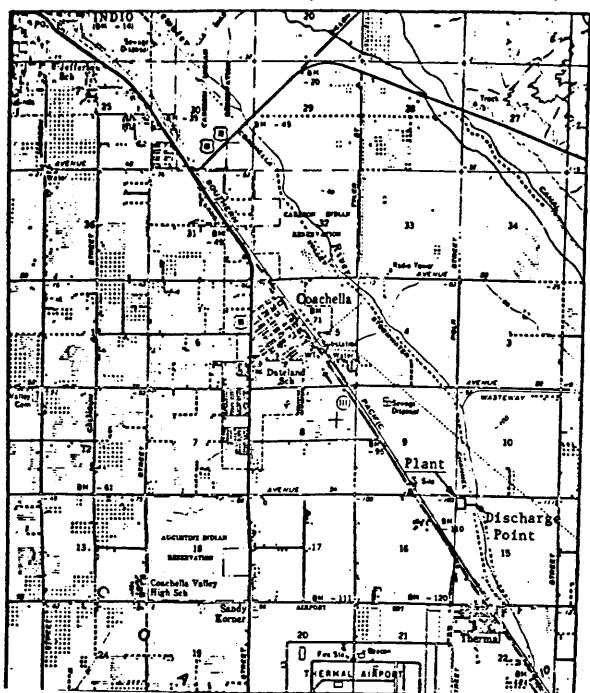
Regional Administrator
U.S. Environmental Protection Agency
Region 9, Attn: 65/MR,W-3
75 Hawthorne Street
San Francisco, CA 94105

ORDERED BY:

January 22, 1992

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



SITE MAP

COACHELLA SANITARY DISTRICT
Coachella - Riverside County
Discharge Point: Coachella Valley Stormwater Channel, in NW4, NW4
of Section 15, T6S, R8E, SBB&M
USGS Coachella 15 min. Topographic Map

Scale: