

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

ORDER NO. 86-76

**WASTE DISCHARGE REQUIREMENTS
FOR
COLLEGE OF THE DESERT
COOLING TOWER BLOWDOWN
Palm Desert - Riverside County**

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

1. College of the Desert (hereinafter also referred to as the discharger), 43-500 Monterey Avenue, Palm Desert, California, 92260, submitted updated information on changes in cooling water treatment on May 29, 1986, and an updated Report of Waste Discharge was submitted, dated August 20, 1986.
2. The discharger is discharging about 5,000 gallons-per-day of cooling tower blowdown water, which is produced from cooling the main buildings of this college. During the summer months the blowdown wastewater reaches a reported total dissolved solids concentration as high as 1500 mg/l. The cooling tower water is discharged into a leach field on site. The college discharge is located in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 17, T5S, R6E, SBB&M.

The discharger has previously been treating the cooling tower blowdown wastewater with biological growth and corrosion control chemicals which included molybdenum, chlorine and sulfuric acid. When present Board Order 85-14 was issued, the discharger reported that the scale and corrosion inhibitor contained molybdenum in a concentration of 0.005 mg/l and would be found in very low levels in the cooling tower blowdown wastewater. However, the subsequent monitoring reports which were submitted by the discharger have shown that levels of molybdenum in the cooling tower water are approximately 8 mg/l. This 8 mg/l of molybdenum is an unacceptably high level. On May 12, 1986, the discharger was asked to submit a plan of action to the Regional Board to deal with these high molybdenum values.

3. The discharger now proposes to use Mongul WS-194 at a dosage rate of from 75 to 100 ppm. Mongul WS-194 consists of small amounts (all 1% to 5%) of polyacrylic acid, sodium hydroxide, aminotrimethylene phosphonic acid, tolyltriazone, and sulfonated polystyrene, and larger amounts of phosphates (85%). These chemicals do not constitute a threat to water quality in the amounts proposed for usage. Chlorine and sulfuric acid would also be added.
4. The discharger has sufficient area available for possible future 100 percent replacement of the leach field.

*Approved by 89-064,
9/20/89*

5. The discharger utilizes domestic water in the cooling tower from two wells on the campus, which are more than two hundred feet from the leach field. The total dissolved solids concentration of the supply water from these wells is about 420 mg/l.
6. The discharge has been subject to waste discharge requirements contained in Board Order No. 85-14.
7. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Regional Board on November 14, 1984.
8. The beneficial uses of ground water of the Coachella Hydrologic Subunit are:
 - a. Municipal supply
 - b. Industrial supply
 - c. Agricultural supply
9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge.
10. The Board in a public meeting heard and considered all comments pertaining to the discharge.
11. These waste discharge requirements govern an existing facility, which the discharger is currently operating, and therefore, is exempt from the provisions of the California Environmental Quality Act in accordance with Section 15301 of Title 14, Chapter 3 of the California Administrative Code.

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

A. Specifications

1. Neither the treatment nor the discharge of wastewater shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. No wastewater other than that described in Finding No. 2 (above) shall be discharged at this location.
3. Wastewater discharged subsurface shall be retained underground with no surfacing.
4. There shall be no chemicals other than those set forth in Finding No. 3 added to the designated cooling tower water system.
5. The wastewater shall not be discharged subsurface unless the total dissolved solids concentration in the discharged wastewater is less than 1,500 mg/l.

6. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.

B. Provisions

1. The discharger shall comply with the attached "Monitoring and Reporting Program No. 86-76", and future revisions thereto, as specified by the Executive Officer.
2. Prior to any modifications in this cooling system, or any material change in location of discharge, the discharger shall report in writing to the Regional Board.
3. Prior to any proposed change in operation, or in control or ownership of the land upon which the discharge facilities are located, the discharger shall report in writing to the Regional Board.
4. Any change in corrosion control or biological control treatment(s) utilized in the cooling tower, shall be reported to the Board including a listing of any of EPA's 126 priority pollutants contained in said treatment(s).
5. This Order supersedes Board Order No. 85-14.

I, Arthur Swajian, 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 September 17, 1986.


Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 86-76 (Rev. No. 1)

FOR

COLLEGE OF THE DESERT
COOLING TOWER BLOWDOWN
Palm Desert - Riverside County

Location of Discharge: Portion of the SE $\frac{1}{4}$, SW $\frac{1}{4}$ of Section 17, T5S, R6E, SBB&M

EFFLUENT MONITORING

Cooling tower blowdown wastewater discharged subsurface shall be monitored for the following constituents:

<u>Constituents</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	Grab*	Quarterly
Chromium	mg/l	Grab*	Annually
Molybdenum	mg/l	Grab*	Annually
Total Phosphate	mg/l	Grab*	Quarterly

WATER SUPPLY MONITORING

Water from the supply wells shall be monitored for total dissolved solids concentration (in mg/l) annually.

REPORTING

Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15 and October 15 of each year.

In lieu of submittal of analysis for Chromium and Molybdenum a statement that no toxic chemicals including chromium and molybdenum have been added to the cooling tower water system during the previous year shall be submitted annually on January 15.

Mail reports to:

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

ORDERED BY:

Arthur Sevajian
Executive Officer

Jan 29, 1988
Date

*Samples shall be taken from the cooling tower catch basin.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 86-76
FOR
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COOLING TOWER BLOWDOWN
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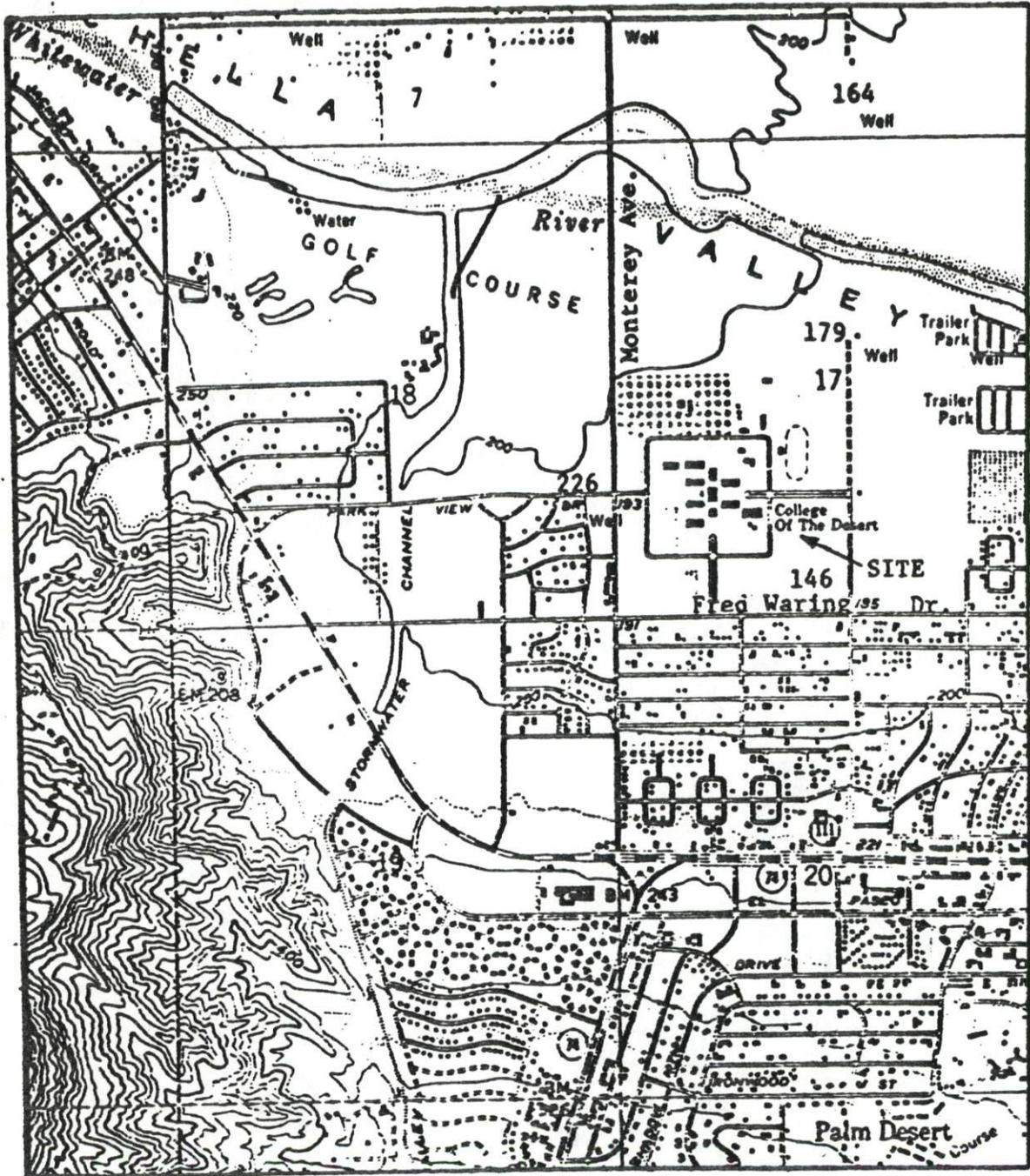
ORDERED BY:


Executive Officer

September 17, 1986
Date

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



SITE MAP
COLLEGE OF THE DESERT
COOLING TOWER BLOWDOWN
 Palm Desert - Riverside County
 SE $\frac{1}{4}$, SW $\frac{1}{4}$ of Section 17, T5S, R6E, SBB&M
 USGS Rancho Mirage 7.5 min. Topographic Map