

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

ORDER NO. 84-82
NPDES NO. CA0104892

**WASTE DISCHARGE REQUIREMENTS
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
TEN MW BRAWLEY GEOTHERMAL GENERATING STATION
North of Brawley - Imperial County**

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

1. Southern California Edison Company, 2244 Walnut Grove Avenue, Rosemead, California 91770, (hereinafter also referred to as the discharger), submitted an updated NPDES Application for Permit to Discharge, dated April 27, 1984. Said application is assigned Application No. CA0104892.
2. The discharger is discharging an average of 188,000 gallons-per-operating day of cooling tower blowdown wastewater and 4,000 gallons-per-day of sand filter backwash wastewater into Spruce 3 Drain in the SE $\frac{1}{4}$ of Section 16, T13S, R14E, SBB&M. Spruce Drain then flows approximately 2,000 feet to New River. At times the discharge is the only water in Spruce 3 Drain.
3. The discharger utilizes Imperial Irrigation District water for cooling following treatment with chemicals for pH control, corrosion, scale, and biological growth inhibition.
4. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Regional Board on May 16, 1984. The Basin Plan contains water quality objectives for Imperial Hydrologic Unit.
5. The beneficial uses of water in New River, and Imperial Valley Drains discharging thereto are:
 - a. Transport of dissolved solids to Salton Sea for agricultural soil salinity control.
 - b. Freshwater replenishment for Salton Sea.
 - c. Warm freshwater habitat for fish and wildlife.
 - d. Recreation - non-water contact.
6. The discharge has been subject to waste discharge requirements adopted in Order No. 79-70 (NPDES No. CA0104892) which allows discharge to Spruce 3 Drain.
7. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 et. seq.) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

*Rescinded
by 86-86
11/19/86*

8. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
9. The Board in a public meeting heard and considered all comments pertaining to the discharge.
10. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing, provided the Regional Administrator has no objections.

IT IS HEREBY ORDERED, Southern California Edison Company, 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 regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Representative samples of wastewater discharged to Spruce 3 Drain shall not contain constituents in excess of the following limits:

Constituent	Unit	30-Day Arithmetic Mean Discharge Rate	Maximum Discharge Rate
a. Total Dissolved Solids	lbs/day	6,405	7,206
	mg/l	4,000	4,500
b. Suspended Solids	lbs/day	48	72
	mg/l	30	45
c. Settleable Matter	ml/l	0.3	1.0
d. Zinc	lbs/day		0.47
	mg/l		0.3
e. Chromium (Total)	lbs/day		.08
	mg/l		0.05
f. Chlorine (Free Available)	mg/l	0.2	0.5

2. There shall be no discharge in detectable amounts of any of EPA's designated 129 priority pollutants (Appendix A, FR Vol. 47, No. 224, November 19, 1982) contained in chemicals added for cooling tower maintenance, except for Chromium and Zinc as set forth in 1.d. and e. (above).
3. There shall be no discharge of polychlorinated biphenyl compounds.
4. The effluent values for pH shall remain within the limits of 6.0 to 9.0.

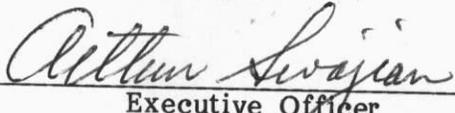
B. Receiving Water Limitations

1. Wastewater discharged to Spruce 3 Drain shall not:
 - a. Cause the temperature of the waters of New River to be increased by more than 5°F at a point further than one hundred (100) feet downstream from outfall of Spruce 3 Drain.
 - b. Cause presence of heavy metals or chemicals at concentrations toxic to fish or other aquatic life.
2. This discharge shall not cause a violation of any 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 and regulations adopted thereunder.

C. Provisions

1. Neither the treatment nor the discharge of wastewater shall cause a 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 Order includes the attached "Monitoring and Reporting Program No. 84-82", and future revisions thereto, as specified by the Executive Officer.
4. Any proposed corrosion control or biological control treatment(s) utilized in the cooling towers, shall be reported to the Board and, also, a listing of any of EPA's 129 priority pollutants contained in said treatment(s).
5. Compliance with the limitations for the 129 priority pollutants set forth in A.2. (above) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical method set forth in 40 CFR Part 136.
6. This Order expires five (5) years from September 19, 1984, and the discharger shall file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as an application for issuance of new waste discharge requirements.
7. This Order supersedes this Board's Order No. 79-70.

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 19, 1984.



Executive Officer

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

MONITORING AND REPORTING PROGRAM NO. 84-82
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
TEN MW BRAWLEY GEOTHERMAL GENERATING STATION
North of Brawley - Imperial County

Location of Discharge: Spruce 3 Drain in SE¼ of Section 16, T13S, R14E, SBB&M

EFFLUENT MONITORING

Wastewater discharged into Spruce 3 Drain shall be monitored for the following constituents. All samples shall be taken between 6 a.m. and 6 p.m. A sampling station shall be established at the point of discharge and shall be located where representative samples of the effluent can be obtained.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	Grab	Weekly
Flow	gallons/day	Daily	Rptd. Monthly**
pH	pH Units	Grab	Weekly
Copper*	mg/l	Grab	Monthly
Zinc (Zn)*	mg/l	Grab	Monthly
Lead*	mg/l	Grab	Monthly
Suspended Solids	mg/l	Grab	Monthly
Settleable Matter	ml/l	Grab	Weekly
Total Chromium (Cr)*	mg/l	Grab	Monthly
Free Available Chlorine	mg/l	Grab	Daily

Prior to commencement of use of any new cooling tower maintenance chemical, the discharger shall report thereon in accordance with Provision C.4 and C.5 of the Order.

* A statement in each report that no additives containing chromium, copper, lead, or zinc are being used may be submitted in lieu of an analysis for these constituents.

** For each day with average monthly flow calculated.

RECEIVING WATER MONITORING

Water in Spruce 3 Drain shall be monitored for the following constituent. All samples shall be taken between 6 a.m. and 6 p.m. A sampling station shall be established where representative samples of water can be obtained.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Temperature*	°F	Grab	Monthly

REPORTING

Daily, weekly and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month.

Forward monitoring reports to:

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

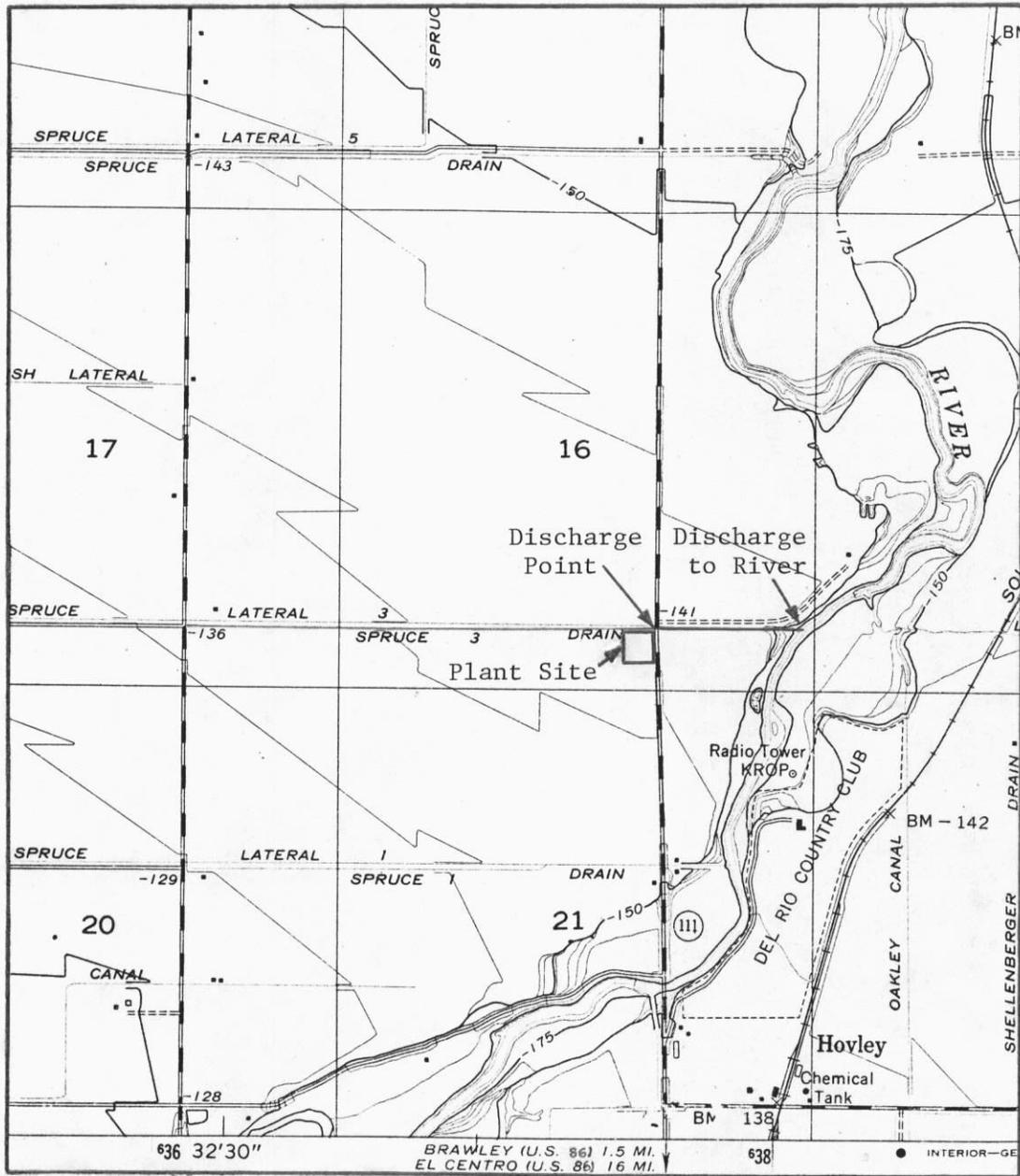
ORDERED BY:


Executive Officer

September 19, 1984
Date

* Temperature of the receiving water shall be taken within 100 feet of the point of discharge, both upstream and downstream of the point of discharge.

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SITE MAP

SOUTHERN CALIFORNIA EDISON COMPANY
 TEN MW BRAWLEY GEOTHERMAL GENERATING STATION
 North of Brawley - Imperial County

Discharge Location: Spruce 3 Drain in the SE $\frac{1}{4}$ of Section 16, T13S, R14E, SBB&M
 USGS Westmorland 7.5 min. Topographic Map

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