

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 81-25
NPDES NO. CA0104914

WASTE DISCHARGE REQUIREMENTS
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
HEBER 50 MEGAWATT GEOTHERMAL GENERATING STATION
South of Heber - Imperial County

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

1. Southern California Edison Company (hereinafter also referred to as the discharger), P.O. Box 800 Rosemead CA, 91770, submitted an NPDES Application for Permit to Discharge, dated July 31, 1980. Said application is assigned Application No. CA0104914.
2. The discharger proposes to discharge a maximum of 50,000 gallons-per-operating-day of cooling tower blowdown wastewater into Strout Drain near the center of the NE 1/4 of Section 34, T16S, R14E, SBB&M. Said wastewater would flow approximately 12 miles via Strout Drain, Central Drain No. 3 and Central Drain to Alamo River. The wastewater enters said river about 30 miles from Salton Sea.
3. The discharger would utilize steam condensate from the turbine cycle as the cooling medium in the cooling tower. Chemicals would be added for pH control, and for corrosion, scale, and biological growth inhibition. The blowdown would have a TDS of about 1200 mg/l.
4. The Water Quality Control Plan for the West Colorado River Basin Region was adopted on April 10, 1975. This Order implements the objectives stated in said Plan.
5. The beneficial uses of water in Alamo 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. Freshwater habitat for fish and wildlife.
 - d. Recreation - non-water contact.

*Revised
11/14/84*

6. Imperial County Planning Department adopted on December 12, 1979, Environmental Impact Report No. 213-79 for this project. This report indicates that this project would not have a significant adverse effect on water quality.
7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
8. The Board in a public meeting heard and considered all comments pertaining to the discharge.
9. 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 Strout Drain shall not contain constituents in excess of the following limits:

<u>Constituent</u>		<u>30-Day Arithmetic Mean Discharge Rate</u>	<u>Maximum Discharge Rate</u>
a. Total Dissolved Solids	lbs/day mg/l	1,668 4,000	1,876 4,500
b. Suspended Solids	lbs/day mg/l	13 30	42 100
c. Settleable Matter	ml/l	0.3	1.0
d. Zinc	lbs/day mg/l		0.13 0.3

<u>Constituents</u>	<u>Units</u>	<u>30-Day Arithmetic Mean Discharge Rate</u>	<u>Maximum Discharge Rate</u>
e. Chromium (Total)	lbs/day mg/l		.02 0.05
f. Total Chlorine Residual	mg/l	0.2	0.5

- The effluent values for pH shall remain within the limits of 6.0 to 9.0.

B. Receiving Water Limitations

- Wastewater discharged to Strout Drain shall not contain any substances in concentrations toxic to human, animal, plant or aquatic life.
- 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 Clean Water Act and regulations adopted thereunder.

C. Provisions

- Neither the treatment nor the discharge of waste shall cause a pollution or a nuisance, as defined in Division 7 of the California Water Code.
- 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.
- This Order includes the attached "Monitoring and Reporting Program No. 81-25", and future revisions thereto, as specified by the Executive Officer.
- This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under sections 301 (b) (2) (C), and (D), 304(b) (2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

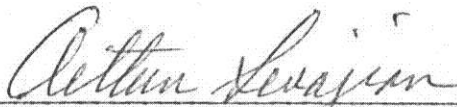
(a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

(b) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

5. Any proposed corrosion control or biological control chemicals utilized in the cooling tower water shall be reported to the Regional Board, and the discharger shall obtain approval from the Executive Officer prior to commencement of discharge of these chemicals.
6. This Order expires five (5) years from March 25, 1981, 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.

I, Arthur Swajian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, on March 25, 1981.



Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 81-25
 FOR
 SOUTHERN CALIFORNIA EDISON COMPANY
 HEBER 50 MEGAWATT GEOTHERMAL GENERATING STATION
 South of Heber - Imperial County

Location of Discharge: Strout Drain in Section 34, T16S, R14E, SBB&M

EFFLUENT MONITORING

Wastewater discharged toward Strout 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	Average Daily	Rptd. Monthly*
pH	pH units	Grab	Weekly
Copper	mg/l	Grab	Monthly
Zinc	mg/l	Grab	Monthly
Lead	mg/l	Grab	Monthly
Suspended Solids	mg/l	Grab	Monthly
Settleable Matter	ml/l	Grab	Weekly
Total Chromium	mg/l	Grab	Monthly
Total Chlorine Residual	mg/l	Grab	Daily - Monday through Friday holidays excepted.

*Reported for each day with average monthly flow calculated.

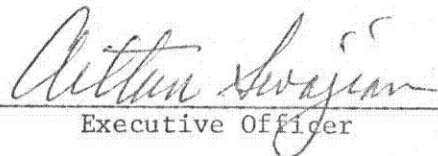
REPORTING

1. The discharger shall notify the Board at least 10 days prior to commencement of discharge, and shall also provide at this time an analysis of the wastewater to be discharged in accordance with the "Effluent Monitoring Program" set forth above.
2. 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

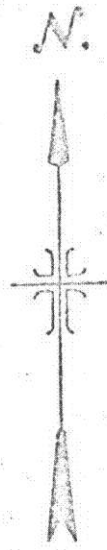
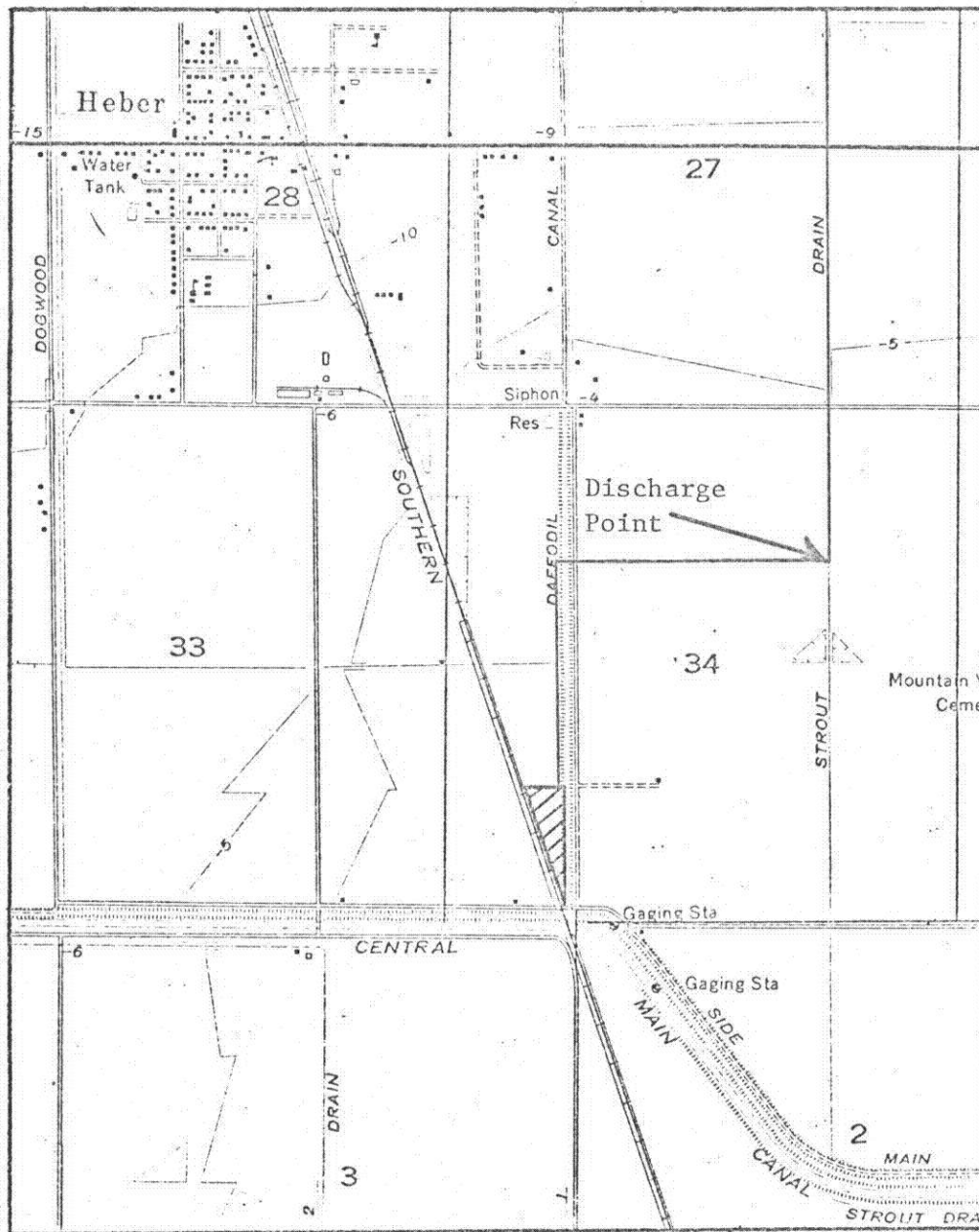
ORDERED BY:


Executive Officer

March 25, 1981

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



Scale:
1" = 2,000'

SITE MAP
SOUTHERN CALIFORNIA EDISON COMPANY
HEBER 50 MEGAWATT GEOTHERMAL GENERATING STATION
South of Heber - Imperial County
Discharge Location: Strout Drain near the center of the NE 1/4 of
Section 34, T16S, R14E, SBB&M
USGS Heber 7.5 min. Topographic Map