CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 84-7 (REVISION NO. 1)
NPDES NO. CA0104965

WASTE DISCHARGE REQUIREMENTS
FOR
HEBER GEOTHERMAL COMPANY
HEBER 47 MEGAWATT (NET) GEOTHERMAL POWER GENERATING STATION
South of Heber - Imperial County

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

1. Heber Geothermal Company (hereinafter also referred to as the discharger), 226 West Brokaw Road, Suite 550, San Jose, California 95110, submitted an NPDES Application for Permit to Discharge, dated October 21, 1983. Said application is assigned Application No. CA0104965.

2. The discharger proposes to discharge an average daily flow of 1.172 MGD of wastewater into Strout Drain in the S½, Section 34, T16S, R14E, SBB&M.

   In addition to the above, storm water in the amount of 3.12 MGD, maximum, would be discharged periodically at the above-described location.

3. The discharger would utilize water supplied by Imperial Irrigation District from Central Main Canal. Chemicals would be added in the cooling tower(s) for pH control, and for 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 November 14, 1984. 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.

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 revise 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.

Revised 89-023 84-7 (No. 1) 1/23/85

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 84-7 (REVISION NO. 1)
NPDES NO. CA0103985

WASTE DISCHARGE REQUIREMENTS
FOR
HEBER GEOTHERMAL COMPANY
HEBER 47 - 29 AA/AT (NEW) GEOTHERMAL POWER GENERATING STATION
South of Heber - Imperial County

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

1. Heber Geothermal Company (hereinafter also referred to as the discharger), 2519 West Broken Road, Suite 550, San Jose, California 95110, submitted an NPDES Application for Permit to Discharge, dated October 21, 1983. Said application is assigned Application No. CA0103985.

2. The discharger proposes to discharge an average daily flow of 1.172 MGD of wastewater into Silent Drain in the SE, Section 34, T16S, R11E, SBB&M.

In addition to the above, storm water in the amount of 3.12 MGD, maximum, would be discharged periodically at the above-described location.

3. The discharger would utilize water supplied by Imperial Irrigation District from Central Main Canal. Chemicals would be added in the cooling tower(s) for pH control, and for 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 November 14, 1984. 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.

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 revise 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.

IT IS HEREBY ORDERED, Heber Geothermal 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 Limitation

Cooling Tower Blowdown

1. The concentration limitation of pollutants discharged in cooling tower blowdown shall not exceed the following:

a. Effluent Characteristic	Maximum Concentration For Any One Day	30-Day Arithmetic Mean Concentration
Free Available Chlorine	0.5 mg/l	0.2 mg/l

b. Effluent Characteristic	Maximum Concentration For Any One Day
Zinc (Zn)	1.0 mg/l
Chromium (Cr)	0.2 mg/l

c. There shall be no discharge in detectable amounts of any of EPA's designated 126 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.b, above.

Total Discharge to Strout Drain

2. The quantity of pollutants discharged to Strout Drain shall not exceed the following:

Constituent	Unit	Maximum Concentration For Any One Day	30-Day Arithmetic Mean Concentration
a. Total Dissolved Solids	mg/l	4,500	4,000
b. Total Suspended Solids	mg/l	100	30
c. Settleable Matter	ml/l	1.0	0.3

3. The pH of the discharge to Strout Drain shall be within the range of 6.0 to 9.0.

4. There shall be no discharge of polychlorinated biphenyl compounds.

5. Neither free available chlorine nor total residual chlorine may be discharged from any generating unit for more than two hours in any one day and not more than one unit may discharge free available or total residual chlorine at any one time.

6. 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.

B. Provisions

1. Neither the treatment nor the discharge of waste shall cause a pollution or a nuisance.

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. 84-7", and future revisions thereto, as specified by the Executive Officer.

4. This Order expires March 21, 1989, 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.

5. 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 become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objections.

6. 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 126 priority pollutants contained in said treatment(s).

7. Compliance with the limitations for the 126 priority pollutants set forth in A.1.c. (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.

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 March 21, 1984, and revised on January 23, 1985 .

Arthur Swajian
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 84-7 (REVISION NO. 1)
FOR
HEBER GEOTHERMAL COMPANY
South of Heber - Imperial County

Location of Discharge: S½, Section 34, T16S, R14E, SBB&M

EFFLUENT MONITORING

Wastewater discharged into Strout Drain, and wastewater from each of the source waste streams designated in the Effluent Limitations, shall be monitored separately and reported as follows:

Constituents	Unit	Type of Sample	Sampling Frequency	Waste* Stream
Total Suspended Solids	mg/l	Grab	Weekly	b
Free Available Chlorine	mg/l	Grab	Daily - Monday through Friday holidays excepted	a
Zinc (Zn)**	mg/l	Grab	Daily	a
Chromium (Cr)**	mg/l	Grab	Daily	a
Total Dissolved Solids	mg/l	Grab	Weekly	b
pH	pH units	Grab	Weekly	b
Settleable Matter	ml/l	Grab	Weekly	b
Flow discharged to Strout Drain, in GPD			Reported Monthly with average daily flow calculated.	

Prior to commencement of use of any new cooling tower maintenance chemical, the discharger shall report thereon in accordance with Provisions B.6 and B.7 of the Order.

* a) Cooling water blowdown
b) Discharge to Strout Drain

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

REPORTING

The discharger shall inform the Regional Board concerning the location of all sampling stations for the above monitoring.

Weekly and daily reports shall be submitted to the Regional Board by the 15th day of the following month.

The discharger shall implement the above monitoring program upon commencement of discharge.

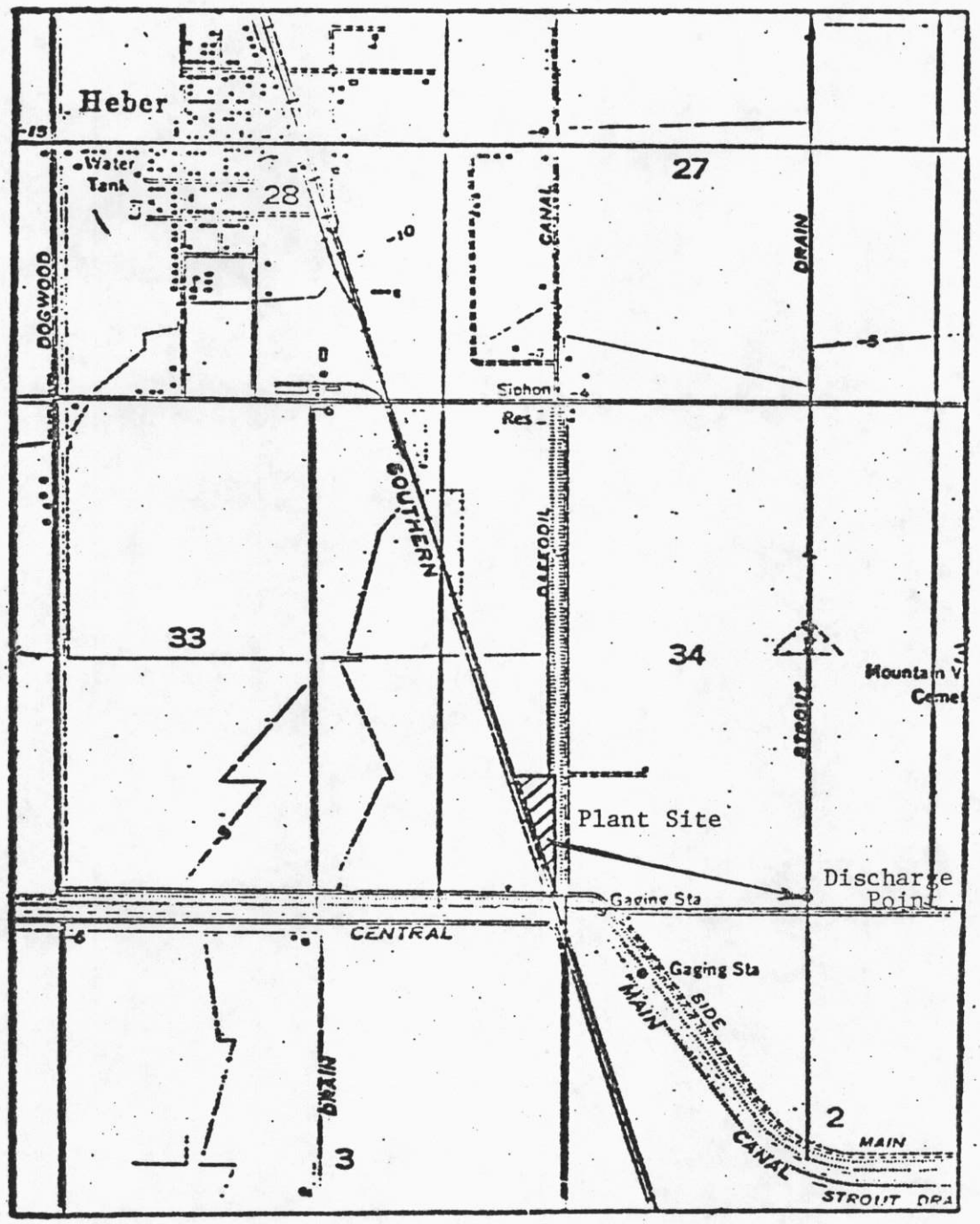
Forward monitoring reports to;

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

ORDERED BY: Alfred Levajian
Executive Officer

January 23, 1985
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



N.

Scale:
1" = 2,000'

SITE MAP

HEBER GEOTHERMAL COMPANY
HEBER 47 MEGAWATT (NET) GEOTHERMAL GENERATING STATION
South of Heber - Imperial County
Discharge Location: Strout Drain in S½, Section 34, T16S, R14E, SBB&M
USGS Heber 7.5 min. Topographic Map

Order No. 84-7