

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 89-081

WASTE DISCHARGE REQUIREMENTS
FOR
HEBER GEOTHERMAL COMPANY
HEBER GEOTHERMAL PLANT
EVAPORATION AND HOLDING BASINS
South of Heber - Imperial

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

1. Heber Geothermal Company (hereinafter referred to as the discharger), P.O. Box 1538, Heber, CA 92249, is operating a 47 Megawatt (Net) geothermal power generating plant south of Heber in Imperial County, California.
2. The discharger submitted updated information regarding the power plant discharge.
3. The discharger has constructed three (3) evaporation and holding basins at the plant. A total of approximately six (6) acres is used by the basins at the south end of the discharger's plant.
4. These basins serve as a standby facility to receive wastewater only under abnormal operating conditions which may occur at the plant such as brine leaks, plant shutdowns, pipe ruptures, and other unexpected adverse situations.
5. These basins are also designed to collect and contain any and all stormwater runoff which may occur at the plant.
6. These basins are lined with compacted clay and are located in the SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 34, T16S, R14E, SBB&M.
7. The Water Quality Control Plan (Basin Plan) for the Colorado River Basin Region of California was adopted by the Regional Board on November 14, 1984. The Basin Plan contains water quality objectives for the Imperial Hydrologic Unit.
8. The beneficial uses of ground water in certain portions of the Imperial Hydrologic Unit are:
 - a. Industrial supply (IND)
 - b. Municipal supply (MUN) (This use is limited to a small portion of the hydrologic unit, with the existing use being practically inconsequential.)

9. Shallow ground waters at the discharge location are brackish and are not beneficially used.
10. Deep ground waters at the discharge location are brackish and are not beneficially used, except for geothermal development.
11. The evaporation and holding basins have been subject to Board Order No. 84-028, adopted by the Regional Board on November 20, 1985.
12. 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 affect on water quality.
13. The purpose of this Board Order is to update waste discharge requirements contained in Board Order No. 84-028.
14. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.
15. The Board in a public meeting heard and considered all comments pertaining to the discharge.

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

A. Discharge Specifications and Prohibitions

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. Geothermal fluids or any fluids in the basins shall not enter any canals, drainage channels, or drains (including subsurface drainage systems) which could provide flow to the Salton Sea, except as allowed under an appropriate National Pollutant Discharge Elimination System (NPDES) permit.
3. Temporary discharge and/or storage of geothermal fluids or any fluids for longer than one (1) year, other than into containment basins having a lining permeability of 1×10^{-6} cm/sec, or less, is prohibited, and the fluids contained therein shall not penetrate through the lining during the containment period.
4. Fluids and/or materials discharged to and/or stored in these containment basins shall not overflow said basins.
5. A minimum freeboard of two (2) feet shall be maintained in each evaporation and holding basin at all times.

6. Adequate protective works and maintenance 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 evaporation and holding basins inoperable during the project life of said basins.
7. Said evaporation and holding basins shall be protected and maintained to ensure their effectiveness.
8. Prior to the disposal of any materials, including fluids and sediments, removed from the evaporation and holding basins, the discharger shall inform the Executive Officer concerning the nature and volume of the materials and the proposed location of disposal. Said materials shall only be disposed of at a location approved by the Regional Board, and then only after the Executive Officer has given prior approval to such disposal.
9. Permanent (longer than one (1) year) disposal or storage of any materials, including fluids and sediments, in the evaporation and holding basins is prohibited.
10. Lack of construction or operational activity on-site for a period of one (1) year shall constitute abandonment for the purposes of this Board Order.
11. Final disposal of residual wastes and cleanup of the evaporation and holding basins shall be accomplished upon abandonment or closure of operations to the satisfaction of the Executive Officer.

B. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 89-081", and future revisions thereto, as specified by the Executive Officer.
2. Prior to the discharge of any wastewater, including stormwater runoff, geothermal fluids, other fluids, and unspecified materials, to any new evaporation and holding basin, the discharger shall submit to the Regional Board a technical report on the construction of said basin. This report shall be prepared by a California Registered Civil Engineer stating that the basin and any attendant facilities are constructed to meet the requirements of this Board Order.
3. The discharger shall submit to the Regional Board, no later than sixty (60) days following adoption of this Order, written adequate assurance that money is committed to ensure that the evaporation and holding basins will be properly cleaned up and closed at the closure of operations to the satisfaction of the Executive Officer. This may be accomplished by submittal of an audited Financial Statement and the related report of its Certified Public Accountants; or, in the form of a closure bond in the amount of \$30,000.00, whichever is suitable to the Executive Officer.

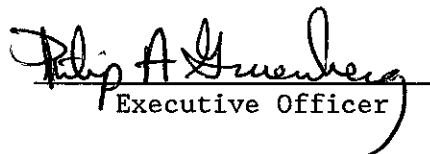
4. In the event of any change in operation, or in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:

a. Notify this Board of such change; and

b. Transmit a copy of this Order to the succeeding owner or operator, and file a copy of the transmittal letter with this Board.

IT IS FURTHER ORDERED that Board Order No. 84-028 be superseded by this 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 November 29, 1989.


Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 89-081

FOR
HEBER GEOTHERMAL COMPANY
HEBER GEOTHERMAL PLANT
EVAPORATION AND HOLDING BASINS
South of Heber - Imperial County

Location of Discharge: SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 34, T6S, R14E, SBB&M

MONITORING

Heber Geothermal Company shall report monitoring data to the Regional Board in accordance with the following schedule:

1. Submit the following information:

<u>Constituents</u>	<u>Reporting Units</u>	<u>Frequency</u>
a. Volume of fluid contained in each evaporation and holding basin	Gallons	Monthly
b. Total Dissolved Solids concentration of fluid in each evaporation and holding basin	mg/l	Monthly
c. Total Suspended Solids in each evaporation and holding basin	mg/l	Monthly
d. pH	pH Units	Monthly
e. Free available Chlorine	mg/l	Monthly

2. Prior to the disposal of any materials, including fluids and sediments, removed from the evaporation and holding basins, the discharger shall inform the Executive Officer concerning the nature and volume of the materials and the proposed location of disposal. Said materials shall only be disposed of at a location approved by the Regional Board, and then only after the Executive Officer has given prior approval to such disposal.

3. Prior to the discharge of any wastewater, including stormwater runoff, geothermal fluids, other fluids, and unspecified materials, to any new evaporation and holding basin, the discharger shall submit to the Regional Board a technical report on the construction of said basin. This report shall be prepared by a California Registered Civil Engineer stating that the basin and any attendant facilities are constructed to meet the requirements of this Board Order.

REPORTING

1. The above monitoring program shall be implemented immediately upon adoption of Board Order No. 89-081.
2. Immediately report any accidental spillage or release of waste material, noting corrective steps taken both to clean up the spillage and to deter possible future spillage.
3. Monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month.

Submit monitoring reports to:

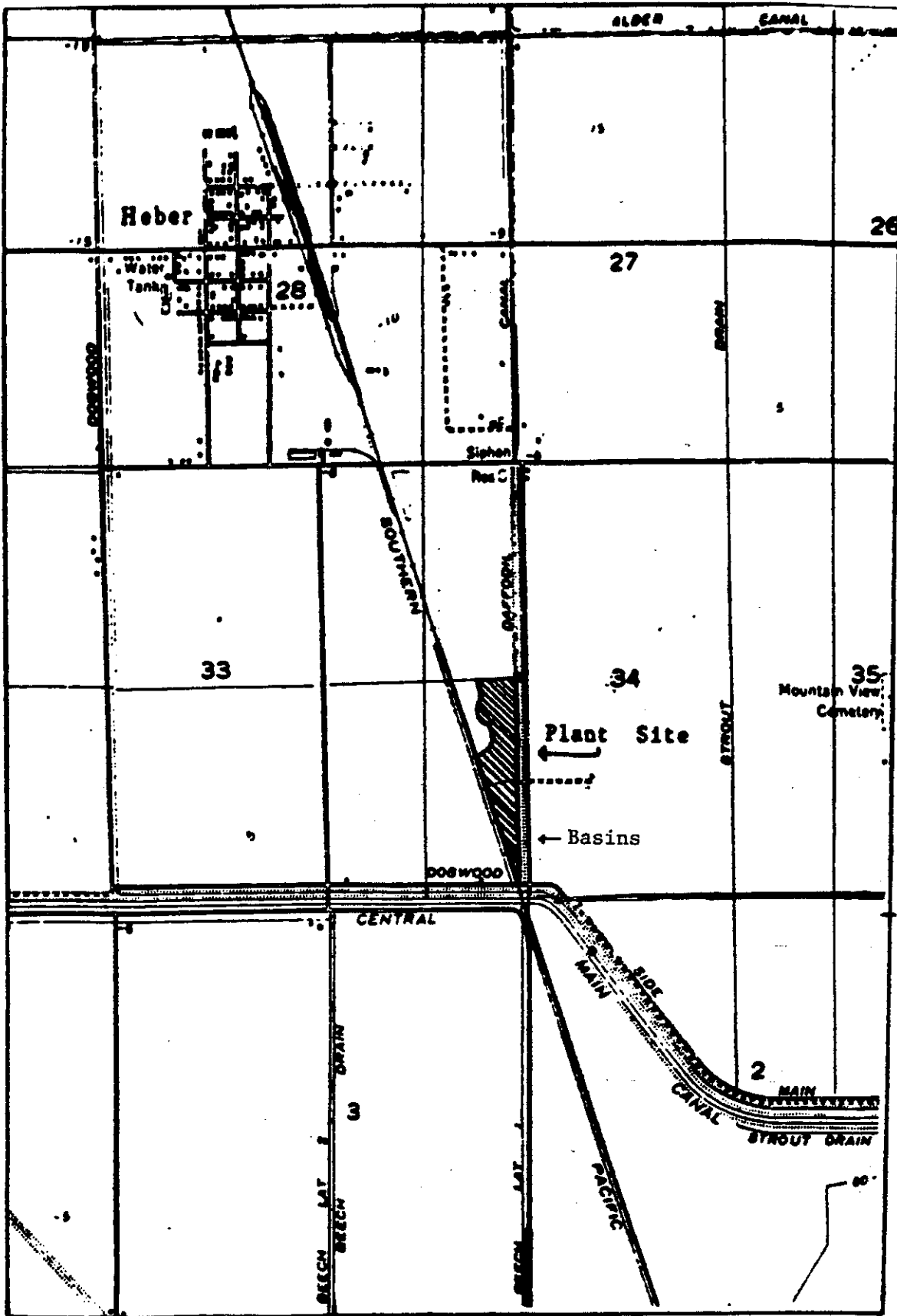
California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

ORDERED BY:

Philip A. Guenher
Executive Officer

November 29, 1989

Date



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SITE MAP
 HEBER GEOTHERMAL COMPANY
 HEBER GEOTHERMAL PLANT
 EVAPORATION AND HOLDING BASINS
 South of Heber - Imperial Valley
 USGS Heber 7.5 min. Topographic Map