CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER NO. 84-45

WASTE DISCHARGE REQUIREMENTS
FOR
MAGMA POWER COMPANY
28 MEGAWATT (NET) GEOTHERMAL POWER PLANT
HOLDING BASIN
Near Salton Sea - Imperial County

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

- Magma Power Company (hereinafter also referred to as the discharger),
 P. O. Box 17760, Los Angeles, California 90017, submitted a report of waste discharge, dated February 6, 1984.
- 2. The discharger proposes to construct a holding basin with a capacity of about 750,000 gallons. Said holding basin would be used to temporarily retain geothermal brines during emergencies and during maintenance operations. Fluids removed therefrom would be injected subsurface.
- 3. The holding basin would be located at the power plant site in the $S^{\frac{1}{2}}$, $SE^{\frac{1}{4}}$, Section 33, T11S, R13E, SBB&M.
- 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. Beneficial uses to be protected by this Order are as follows:
 - a. Agricultural subsurface drainage water which enters tile drains and open drains near the proposed project has a total dissolved solids content of from 2,000 mg/l to 6,300 mg/l and serves as a source of fresh water for replenishment for Salton Sea.
 - b. Below tile drains and in areas with no tile drains, the ground water has a total dissolved solids content of 12,000 mg/l to 50,000 mg/l.
 - c. Deep geothermal water has a total dissolved solids content in excess of 200,000 mg/l and is being investigated for geothermal development.
- 6. Imperial County Planning Department adopted on December 10, 1980, a "Supplement to Environmental Impact Report SCH #79072515" which contains mitigation measures for this proposed 28 megawatt power plant. This report indicates that this project would not have a significant effect on water quality.

Superceded 89-043 6/28/89

- 7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
- 8. The Board in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, Magma Power Company shall comply with the following:

A. Discharge Specifications

- 1. Neither the treatment nor the discharge of wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
- 2. Geothermal fluids and other wastes shall not enter any canals, drainage channels, or drains (including subsurface drainage systems) which could provide flow to Salton Sea, except as allowed under an appropriate NPDES permit.
- 3. Temporary discharge and/or storage of geothermal fluids or wastes for less than one year, other than into containment basins or other containers having a lining permeability of 1 \times 10⁻⁶ cm/sec, or less, is prohibited, and the fluids contained therein shall not penetrate through the lining during the containment period.
- 4. Permanent disposal of any wastes at this site is prohibited. Interim storage of geothermal fluids or wastes for longer than one year, other than into containment basins or other containers having a lining permeability of 1 X 10⁻⁸ cm/sec, or less, is prohibited, and the fluids contained therein shall not penetrate through the lining during the containment period.
- Materials discharged to and/or stored in containment basins shall not overflow said basins.
- 6. Adequate protective works and maintenance shall be provided to assure that each containment basin shall not become eroded or otherwise damaged by floods occurring during the project life of said basins.
- 7. A minimum freeboard of two feet shall be maintained in each containment basin at all times.
- 8. Prior to the disposal of any materials contained in containment 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 at a location approved by the Regional Board.
- 9. Final disposal of residual wastes and cleanup of containment basins shall be accomplished upon abandonment of operations.

B. Provisions

- 1. The discharger shall comply with "Monitoring and Reporting Program No. 84-45," and future revisions thereto, as specified by the Executive Officer.
- 2. Prior to discharge to any newly constructed containment basin, the discharger shall submit to the Regional Board a technical report on the construction of said basin, and a certificate signed by a California Registered Civil Engineer stating that the basin and attendant facilities are constructed to meet the requirements of this Order.

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 Man 16, 1984.

Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 84-45 FOR MAGMA POWER COMPANY 28 MEGAWATT (NET) GEOTHERMAL POWER PLANT HOLDING BASIN Near Salton Sea - Imperial County

Location of Discharge: S1, SE1, Section 33, T11S, R13E, SBB&M

MONITORING

- 1. At least 20 days prior to discharge to a newly constructed containment basin, Magma Power Company shall submit to the Regional Board a technical report on the construction of said basin, and a certificate signed by a California Registered Civil Engineer stating that the basin and attendant facilities are constructed to meet the requirements contained in Board Order No. 84-45.
- 2. Upon commencement of any discharge to the holding basin, Magma Power Company shall inform the Executive Officer concerning the date that the discharge began, the volume of discharge, the scheduled date for removal of geothermal brines therefrom, and the proposed location and/or method of final disposal.
- 3. Magma Power Company shall inform the Executive Officer when all geothermal materials have been removed from the holding basin.

REPORTING

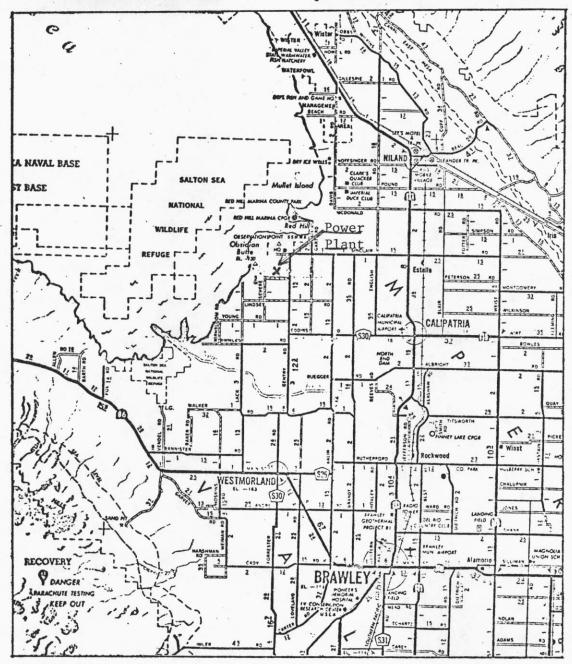
4. Magma Power Company shall submit the above reports for Items 2 and 3 in writing to the Executive Officer within five days following commencement of discharge and, also, removal of all geothermal materials.

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: Ithin Seven Executive of June 6, 198

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MAGMA POWER COMPANY
28 MEGAWATT (NET) GEOTHERMAL POWER PLANT
HOLDING BASIN
Imperial County
S¹/₂, SE¹/₄, Section 33, T11S, R13E, SBB&M

