

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

ORDER NO. 87-28

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

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

1. 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 December 15, 1986.
2. The discharger proposes to construct a containment basin with a capacity of about 750,000 gallons. Said containment basin would be used to temporarily retain geothermal brines during emergencies and during maintenance operations. Fluids removed therefrom would be injected subsurface.
3. The containment basin would be located at the power plant site in the N $\frac{1}{2}$ , SE $\frac{1}{4}$ , Section 33, T11S, R13E, SBB&M.
4. The Water Quality Control Plan for the Colorado River Basin Region was adopted on November 14, 1984.
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 of the 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. The Imperial County Planning Commission approved this project in a Notice of Determination adopted on September 24, 1986. The Notice of Determination is referenced as the Final Salton Sea Master Environmental Impact Report SCH #80102409. This report indicates that this project would not have a significant effect on water quality.

*Superseded  
by Bd. Ord.  
# 92-031 5/13/92*

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

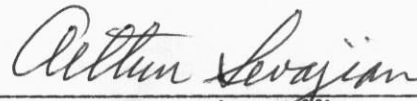
1. Neither the treatment nor the discharge of wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. Geothermal fluids and other wastes shall not enter any canals, drainage channels, or drains (including subsurface drainage systems) which could provide 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  $1 \times 10^{-8}$  cm/sec, or less, is prohibited, and the fluids contained therein shall not penetrate through the lining during the containment period.
5. 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 be disposed at a location approved by the Executive Officer.
9. Final disposal of residual wastes and cleanup of containment basins shall be accomplished upon abandonment of operations.

\* National Pollutant Discharge Elimination System

B. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 87-28," 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 March 18, 1987.

  
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Executive Officer

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

**MONITORING AND REPORTING PROGRAM NO. 87-28  
FOR**

**MAGMA POWER COMPANY  
35 MEGAWATT (NET) VULCAN II  
GEOTHERMAL POWER PLANT HOLDING BASIN  
Near Salton Sea - Imperial County**

Location of Discharge: N $\frac{1}{2}$ , SE $\frac{1}{4}$ , 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. 87-28.
2. Upon commencement of any discharge to the containment 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 containment basin.

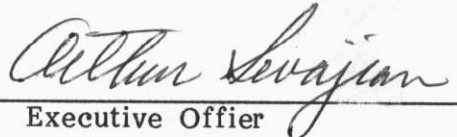
**REPORTING**

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

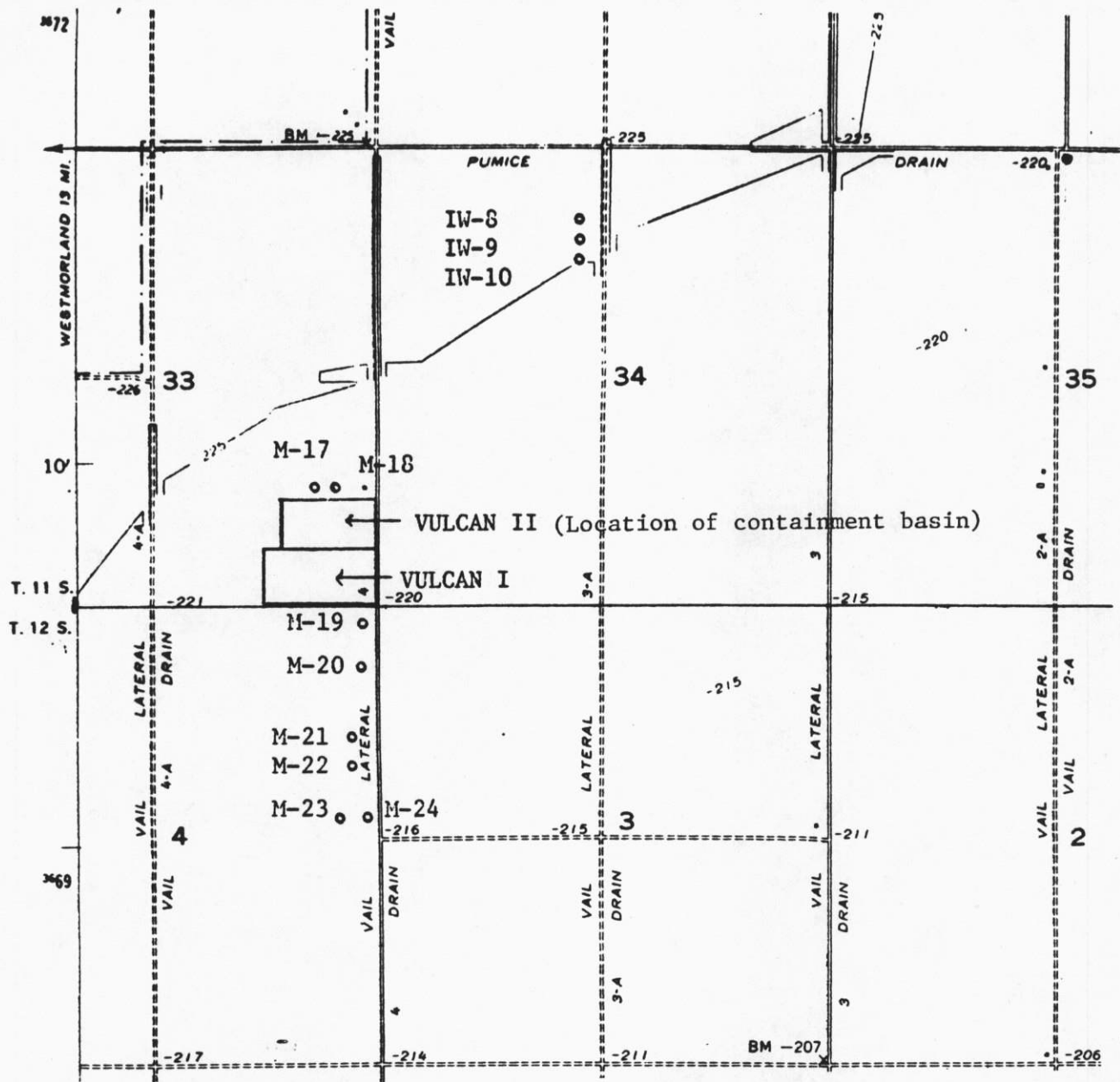
ORDERED BY:

  
Executive Officer

March 18, 1987

Date

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD -7



SITE MAP

MAGMA POWER COMPANY  
35 MEGAWATT (NET) VULCAN II  
GEOTHERMAL POWER PLANT CONTAINMENT BASIN  
Near Salton Sea - Imperial  
N $\frac{1}{2}$ , SE $\frac{1}{4}$ , Section 33, T11S, R13E, SBB&M  
USGS Obsidian Butte 15 Min. Topographic Map

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