# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER NO. 92-031

WASTE DISCHARGE REQUIREMENTS
FOR
DEL RANCH LIMITED PARTNERSHIP
45 MEGAWATT (NET)
DEL RANCH 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 (the previous owner), P.O. Box 17760, Los Angeles, California, 90017 submitted a Report of Waste Discharge, dated December 15, 1986. The resulting Waste Discharge Requirements were transferred to Del Ranch Limited Partnership (hereinafter also referred to as the discharger) on March 14, 1988.
- 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. The basin design will be in accordance with Class III Surface Impoundments as described in Title 23, Division 3, Chapter 15 of the California Code of Regulations heretofore referred to as Chapter 15. Fluids removed from the containment basin would be injected subsurface into the Known Geothermal Resource Area (KGRA).
- 3. The containment basin would be located at the power plant site in the  $N_2^1$ ,  $SE_4^1$ , Section 33, T11S, R13E, SBB&M. The address of the site is 729 Gentry Road, Calipatria, CA 92233.
- 4. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted May 15, 1991 and designates the beneficial uses of ground and surface waters in this Region.
- 5. The designated beneficial uses of ground waters in the Imperial Hydrologic Unit are:
  - 1. Municipal supply (MUN)
  - 2. Industrial supply (IND)
- 6. Within the Imperial Valley area of the Imperial Hydrologic Unit, much of the ground water is too saline for municipal use. The existing municipal use in this area is practically inconsequential.
- 7. 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.

- 8. The beneficial uses of waters in the Imperial Valley Drains are:
  - a. Fresh Water Replenishment of Salton Sea (FRSH)
  - b. Noncontact Water Recreation (REC II)
  - c. Warm Water Habitat (WARM)
  - d. Wildlife Habitat (WILD)

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- e. Preservation of Rare, Endangered or Threatened Species (RARE)
- f. Water Contact Recreation (REC I)
- 9. The facility has been subject to waste discharge requirements in Board Order No. 87-028.
- 10. 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.
- 11. Deep geothermal water has a total dissolved solids content in excess of 200,000 mg/L and is being investigated for geothermal development.
- 12. 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.
- 13. The Board has notified the discharger and all known interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.
- 14. The Board in a public meeting heard and considered all comments pertaining to this discharge.

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

### A. Discharge Specifications

- 1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(1) and 13050(m) of Division 7 of the California Water Code.
- 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 National Pollutant Discharge Elimination System (NPDES) permit.
- 3. All containments are required to meet Chapter 15 requirements for Class III surface impoundments.
- 4. Temporary discharge and/or storage of geothermal fluids or wastes for less than one year, other than into containment basin 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.
- 5. 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 basin 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.

- 6. Materials discharged to and/or stored in containment basin shall not overflow said basin.
- 7. 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 basin. After construction of the basin, a report certified by a California Professional Engineer is to be submitted.
- 8. A minimum freeboard of two (2) feet shall be maintained in each containment basin at all times.
- 9. Prior to the disposal of any materials contained in the containment basin, the discharger shall inform the Regional Board's 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 Regional Board's Executive Officer.
- 10. Final disposal of residual wastes and cleanup of all containment basin and sumps shall be accomplished to the satisfaction of the Regional Board's Executive Officer upon abandonment or closure of operations. Lack of construction or operational activity on the site for a period of one year shall constitute abandonment for the purposes of this Board Order. Closure shall be carried out in accordance with Chapter 15.
- 11. The waste disposal facility shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods having a predicted frequency of once in 100 years.

#### B. Provisions

- The discharger shall comply with "Monitoring and Reporting Program No. 92-031", and future revisions thereto, as specified by the Regional Board's Executive Officer.
- 2. At least 10 days prior to the initial discharge of any material into a new temporary containment basin, the discharger shall submit a report signed by a California Registered Civil Engineer to the Regional Board advising the Regional Board's Executive Officer that the containment basin and attendant facilities are constructed to meet the requirements of this Board Order.

IT IS FURTHER ORDERED that Board Order No. 87-028 be superseded by this Board 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 May 13, 1992.

Executive Officer

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 92-031 FOR

DEL RANCH LIMITED PARTNERSHIP
45 MEGAWATT (NET)
DEL RANCH GEOTHERMAL POWER PLANT HOLDING BASIN
Near Salton Sea - Imperial County

Location of Discharge: N1, SE1, Section 33, T11S, R13E, SBB&M

### MONITORING

- 1. At least 20 days prior to discharge to a 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 contained in Board Order No. 92-031.
- 2. Upon commencement of any discharge to the containment basin, the discharger shall inform the Regional Board's Executive Officer in writing concerning the date that the discharge began, the volume of the discharge, the scheduled date for removal of geothermal brines therefrom, and the proposed location and/or method of final disposal. This information must be submitted within five (5) days following commencement of the discharge.
- 3. During operation of the basin, quarterly reports indicating free board and volume of basin's contents shall be submitted to the Regional Board.
- 4. The discharger shall inform the Executive Officer in writing when all geothermal materials have been removed from the containment basin.

Submit monitoring reports to:

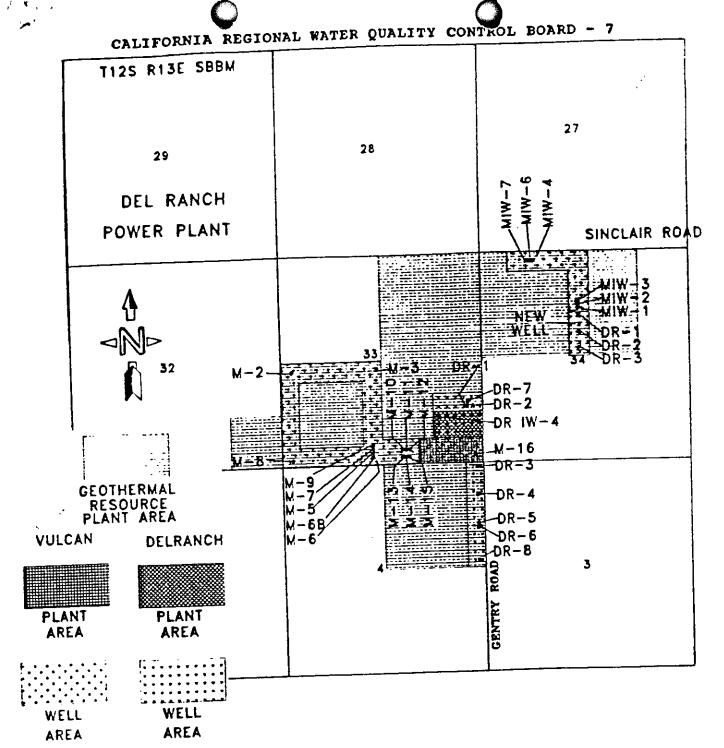
California Regional Water Quality Control Board Colorado River Basin Region 73-271 Highway 111, Suite 21 Palm Desert, CA 92260

ORDERED BY:

Executive Officer

<u>May 13, 1992</u>

Date



SITE MAP

DEL RANCH, A LIMITED PARTNERSHIP
45 MEGAWATT (NET)
DEL RANCH GEOTHERMAL POWER PLANT HOLDING BASIN
Near Salton Sea - Imperial County