Entered October 30, 1981

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NC. 7329 Order No. R-6811

APPLICATION OF LOCO HILLS WATER DISPOSAL COMPANY FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 23 1981, at Santa Fe, New Mexico, before Examiner Richard I. Stamets.

NOW, on this <u>30th</u> day of October, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That Order (3) of Division Order No. R-3221, as amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Rocsevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

(3) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

-2-Case No. 7329 Order Nc. F-6811

(4) That the State Engineer has designated, pursuant to Section 70-2-23 (15), NMSA, 1978 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.

(5) That the applicant, Loco Hills Water Disposal Company, seeks as an exception to the provisions of the aforesaid Order (3) to permit the commercial disposal of salt water into an unlined surface pit or pits containing from 5 to 15 surface acres to be located in the N/2 SW/4 SW/4 of Section 16, Township 17 South, Range 30 East, Eddy Courty, New Mexico.

(6) That disposal rates would be from 2000 to 2500 barrels per month per acre or from 1000 to 1250 barrels per day at the maximum pit size.

(7) That neither the pit(s) nor the immediate underlying sediments are impervious and a percentage of the disposed water would leak into the subsurface to enter the Santa Rosa and Pustler Anhydrite formations.

(8) That while the Santa Rosa formation contains no fresh water in the immediate vicinity of the proposed pit(s), it does contain fresh water at various locations both up-dip and down-dip therefrom.

(9) That clay zones within the Santa Rosa could contribute to the horizontal migration of waters percolating from said pits which waters could reach and contaminate downdip fresh water supplies in said formation.

(10) That if the salt water from said pits should percolate vertically through the Santa Rosa formation, it would enter the Rustler formation and move therethrough in a generally Southward direction to the Pecos River.

(11) That insufficient data was presented relative to the long term effect of the disposal of salt water in the proposed pit(s) and its potential affect on surface and subsurface waters in the following areas:

- (a) percolation rates;
- (b) fluid retention by the Santa Posa formation (volume and area);

-3-Case No. 7329 Order No. R-6811

- (c) Rustler formation water quality outside the immediate area; and,
- (d) the ground water regime vis-a-vis the Rustler formation and the Pecos River.

(12) That because of the potential for contamination of fresh water supplies in the Santa Rosa formation and because of insufficient data upon which to make reasonable determinations relative to the need for protection of or the long term effects upon waters in the Rustler formation or Pecos Piver, the subject application should be <u>denied</u>.

IT IS THEREFORE ORDERED:

(1) That the application of Loco Hills Water Disposal Company for approval of commercial surface salt water disposal facility, as an exception to Order (3) of Division Order No. R-3221, is hereby <u>denied</u>.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION anc JOE D. RAMEY, Director

SEAL.