

Entered December 14, 1979
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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 NO. 6753
Order No. R-111-M

APPLICATION OF AMAX CHEMICAL
CORPORATION FOR THE AMENDMENT
OF ORDER NO. R-111-A, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 12, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of December, 1979, 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 the applicant herein, **Amax** Chemical Corporation, seeks the expansion of the Potash-Oil Area as defined by Division Order No. R-111-A, as amended by Orders Nos. **R-111-B** through **R-111-L**, inclusive, by the inclusion therein of the following described lands in Eddy County, New Mexico:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM

Section 26: N/2 **NW/4**

Section 27: N/2 NE/4 and NE/4 NW/4

- (3) That section 70-2-12 **B(17)** NMSA 1978 Comp. empowers the Division **"....to regulate and where necessary prohibit drilling or producing operations for oil or gas within any area containing commercial deposits of potash where such operations would have the effect unduly to reduce the total quantity of such commercial deposits of potash which may reasonably be recovered in commercial quantities or where such operations would interfere unduly with the orderly commercial development of such potash deposits;"**

(4) That in order to carry out its statutory mandate to prevent the waste of potash and to regulate and where necessary prevent drilling operations within any area containing commercial deposits of potash, the Division by its Order No. R-111-A, as amended, has promulgated the "Potash-Oil Area" wherein it has found to exist such commercial deposits of potash and has prescribed special casing and cementing rules as well as certain procedures for issuance of drilling permits.

(5) That pursuant to Order No. R-111-A and the Rules and Regulations of the Division, **Amax** Chemical Corporation did on November 8, 1979, file its application for hearing to consider the expansion of the Potash-Oil Area as described in Finding No. (2) above, alleging that the lands sought to be included in the Potash-Oil Area "**....are** believed to contain commercially recoverable quantities of potash ore for the reason that applicant is doing exploratory drilling, all of which core tests show commercially recoverable quantities of potash ore reaching from a low of 48 inches of 12.4 percent **K₂O** to a high of 48 inches of 20 percent **K₂O**."

(6) That the presently defined Potash-Oil Area in the vicinity of the lands under consideration in this case includes the E/2 of Section 22 and all of Section 23, Township 19 South, Range 29 East, NMPM, Eddy County, New **Mexico**, and the proposed extension is contiguous thereto.

(7) That the applicant has drilled its Core Hole No. **146-A** at a point approximately 1520 feet from the North line and 500 feet from the West line of Section 26, Township 19 South, Range 29 East, NMPM, and said core hole indicates a 3rd ore zone accumulation of 48 inches of 12.4 percent **K₂O** ore.

(8) That the applicant has drilled its Core Hole No. 156 approximately 700 feet from the North line and 2500 feet from the East line of Section 27, Township 19 South, Range 29 East, NMPM, and said core hole indicates a 3rd ore zone accumulation of 48 inches of **21.1** percent **K₂O** ore.

(9) That the grades of potash encountered in the above-described core holes constitute commercially recoverable potash reserves, particularly in view of **Amax Chemical Corporation's** method of blending the higher grade ores and lower grade ores together for processing.

(10) That it is reasonable to extrapolate the commercial deposits of potash in the E/2 of Section 22 and in Section 23, Township 19 South, Range 29 East, NMPM, and which are already

-3-

Case No. 6753

Order No. R-111-M

included in R-111-A, across the lands sought to be included in R-111-A to the core holes described in Findings Nos. (7) and (8) above, and to thereby determine that said lands sought to be included in the Potash-Oil Area do contain commercial deposits of potash.

(11) That the N/2 NW/4 of Section 26 and the NE/4 NW/4 and N/2 NE/4 of Section 27, all in Township 19 South, Range 29 East, NMPM, contain commercial deposits of potash, and that said lands should be included in the Potash-Oil Area as defined by Order No. R-111-A, as amended.

(12) That The Petroleum Corporation of Delaware proposes to drill a Morrow test well at a point 660 feet from the North line and 1980 feet from the East line of Section 27, Township 19 South, Range 29 East, NMPM, and that said location is within the proposed extension to the Potash-Oil Area described in Finding No. (11) above.

(13) That the drilling of said well, if completed as a high-pressure natural gas well at the location proposed, would require applicant Amax Chemical Corporation to forego primary mining operations anywhere within a 200 foot radius of the well bore where it penetrates the potash beds, and to forego secondary mining operations anywhere within a 750 foot radius of the well bore where it penetrates the potash beds, in order to avoid the hazard of the **shear** forces which would be exerted on the well during subsidence following secondary mining, and the possible entry of natural gas into the potash mine.

(14) That assuming an average **K₂O** content of 21.1 percent in the 200 foot radius of no mining and 15 percent in the 750 foot radius of no secondary mining, it is estimated that 34,844 tons of finished potash product would be lost if the well described in Finding No. (12) above were to be drilled at the proposed location.

(15) That at the current market price of \$60.00 per ton for the finished product, the lost potash described in Finding No. (14) above would have a value in excess of \$2 million.

(16) That the casing and cementing program for The Petroleum Corporation of Delaware well described in Finding No. (12) above does not comply with the casing and cementing program for deep wells prescribed by Order No. R-111-A.

-4 -

Case No. 6753

Order No. R-111-M

(17) That in the interest of mine safety and the protection of human life, and in the interest of the protection of commercial deposits of potash and the prevention of waste thereof, the aforesaid well should not be drilled at the above-described location.

(18) That in order to afford The Petroleum Corporation of Delaware the opportunity to produce its just and equitable share of the gas in the reservoir underlying the subject lands, and to protect correlative rights, said company should be permitted to drill at a standard location in the N/2 of Section 27 other than in the NE/4 NW/4 or the NW/4 NE/4, or should request an unorthodox location in the S/2 NE/4 of said Section 27.

IT IS THEREFORE ORDERED;

(1) That the application of Amax Chemical Corporation for the extension of the Potash-Oil Area, as defined by Division Order No. R-111-A, as amended, is hereby approved, and said Potash-Oil Area is extended to include therein the following described lands, all in Eddy County, New Mexico:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM

Section 26: N/2 NW/4

Section 27: NE/4 NW/4 and N/2 NE/4

(2) That no well not already drilled in the above-described lands shall be drilled unless a permit therefor has been obtained in accordance with the provisions of Order No. R-111-A and/or unless the casing-cementing program for such well complies with the casing-cementing program prescribed by Order No. R-111-A.

(3) That the Drilling Permit for The Petroleum Corporation of Delaware Parkway West Unit Well No. 9, proposed to be drilled to the Morrow formation at a point 660 feet from the North line and 1980 feet from the East line of Section 27, Township 19 South, Range 29 East, NMPM, Eddy County, New Mexico, is hereby revoked.

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

-5-

Case No. 6753

Order No. R-111-M

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

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