STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 10508 Order No. R-6446-E

IN THE MATTER OF CASE 10508 BEING CALLED BY THE OIL CONSERVATION COMMISSION ON ITS OWN MOTION PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-6446-B WHICH APPROVED THE BRAVO DOME CARBON DIOXIDE GAS UNIT AGREEMENT, TO PERMIT AMOCO PRODUCTION COMPANY, THE OPERATOR OF SAID UNIT, TO REVIEW OPERATIONS AND DEMONSTRATE TO THE COMMISSION THAT ITS OPERATIONS WITHIN THE UNIT ARE RESULTING IN THE PREVENTION OF WASTE AND THE PROTECTION OF CORRELATIVE RIGHTS ON A CONTINUING BASIS, HARDING, UNION AND QUAY COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 16, 1992, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this $27 \, \text{th}$ day of August, 1992, the Commission, a quorum being present, having considered the testimony, the record, and the exhibits, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) On January 23, 1981, the Commission entered Order No. R-6446-B which granted the application of Amoco Production Company, hereinafter referred to as "Amoco", for approval of the Bravo Dome Carbon Dioxide Gas Unit, hereinafter referred to as "the unit", located in Union, Harding and Quay Counties, New Mexico.
 - (3) Order R-6446-B provided, among other things:
 - (a) "That the operator of said unit shall be required to periodically demonstrate to the Commission that its operations within the unit are resulting in the prevention of waste and the protection of correlative rights on a continuing basis."

- (b) "That such demonstration shall take place at a public hearing held at least every four years following the effective date of the unit or at such lesser intervals as the Commission may require."
- (4) The unit became effective on November 1, 1980.
- (5) Hearings were held on August 3, 1984 and on July 14, 1988, before the Commission pursuant to Order R-6446-B and the Commission entered Orders R-6446-C and R-6446-D finding that unit operations were preventing waste and protecting correlative rights, and further ordering that the case be reopened for additional evidence before or during August, 1992. The reopened case was originally docketed as Case No. 9428 but subsequent docketing under Case No. 10508 has fulfilled the reopening requirement under Order R-6446-B.
- (6) Amoco presented exhibits and testimony which traced the geologic history of the Bravo Dome area, describing and defining rock units which comprise the carbon dioxide bearing reservoir units in the Tubb formation.
- (7) The present productive plant capacity for the Bravo Dome Carbon Dioxide Gas Unit is 390 million cubic feet per day.
- (8) The current total deliverability of all active wells connected to the Unit gathering system is approximately 325 million cubic feet per day and this deliverability has been sufficient to meet Amoco's market demand for $\rm CO_2$ throughout the life of the unit.
- (9) Production and sale of carbon dioxide have varied from an average 40 million cubic feet per day in the first year of operation being 1984, to a peak in 1988 of 366 million cubic feet per day average to a current average of 288 million cubic feet per day.
- (10) Capital investment and operational expenditures over the past four years have totaled about \$93 million and have been targeted at operating efficiency and environmental controls.
- (11) The current market for carbon dioxide from Bravo Dome is enhanced oil recovery projects in the Permian Basin which has been the historical market for this gas.
- (12) Market demand for carbon dioxide has been sensitive to the price and anticipated future price of crude oil.
- (13) Unit operations have resulted in efficient, orderly and economical exploration of the unit area and economical production, field gathering and treatment of carbon dioxide within the unit thereby preventing surface and underground waste of carbon dioxide.

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- (14) Amoco is carrying out their duties as unit operator of the Bravo Dome Carbon Dioxide Gas Unit and their actions within the unit area are resulting in the protection of the correlative rights of interest owners within the unit.
- (15) In accordance with ordering paragraphs (4) and (5) of said Order No. R-6446-B this case should be reopened for additional testimony at a hearing during or before August, 1996.

IT IS THEREFORE ORDERED THAT:

- (1) The operations of Amoco Production Company, as unit operator of the Bravo Dome Carbon Dioxide Gas Unit located in Harding, Union and Quay Counties, New Mexico, are hereby found to be resulting in the prevention of waste of carbon dioxide gas and the protection of correlative rights of interest owners within the unit.
- (2) This case shall be reopened for additional testimony at a hearing during or before August, 1996.
- (3) Jurisdiction of this case is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

GARÝ CARLSON, Member

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Bill Weiss

WILLIAM W. WEISS, Member

WILLIAM J. LEMAY, Chairman

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