STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

# <u>MEMORANDUM</u>

# TO: OIL OPERATORS AND INTERESTED PARTIES

- FROM: WILLIAM J. LEMAY, Director Oil Conservation Division
- SUBJECT: PROPOSED RULES AND REGULATIONS FOR ENHANCED OIL RECOVERY PROJECT CERTIFICATION FOR SEVERANCE TAX RELIEF
  - DATE: MAY 14, 1992

House Bill 23, commonly referred to as the "Enhanced Oil Recovery Act", was passed by the New Mexico Legislature this year and signed into law by Governor King. This legislation requires the Oil Conservation Division to establish rules and regulations to qualify certain projects for severance tax relief. In accordance with the implementation of this legislation, enclosed are proposed rules and procedures for your evaluation and comment. The Oil Conservation Commission will take testimony on rules and regulations to implement the Enhanced Oil Recovery Act at their June 18, 1992 hearing. We invite your participation in this rulemaking process.



Dockets Nos. 17-92 and 18-92 are tentatively set for June 11, 1992 and June 25, 1992. Applications for hearing must be filed at least 23 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - THURSDAY - MAY 28, 1992 8:15 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

#### The following cases will be heard before David R. Catanach, Examiner or Michael E. Stogner, Alternate Examiner:

- Application of Mewbourne Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying the following described area in Section 26, Township 19 South, Range 27 East, and in the following manner: the N/2 forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre gas spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated McMillan-Atoka Gas Pool, Undesignated Angell Ranch Atoka-Morrow Gas Pool, Undesignated North McMillan-Morrow Gas Pool and Undesignated South Millman-Morrow Gas Pool; the NE/4 forming a 160-acre gas spacing and proration unit for any and all formations and/or pools developed on 160-acre gas spacing within said vertical extent; and, the NE/4 NE/4 forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Millman-Grayburg Pool. Said units are to be dedicated to a single well to be drilled in the NE/4 NE/4 (Unit A) of said Section 26. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well. Said area is located approximately 7 miles east of Lakewood, New Mexico.
- <u>CASE 10478</u>: Application of Merrion Oil and Gas Corporation for pool creation and temporary special pool rules, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Fractured Mancos Shale formation comprising all of Townships 18 and 19 North, Range 3 West, and the promulgation of temporary special rules therefor including provisions for 640-acre oil spacing, designated well locations, and special allowables. Said area is centered approximately 18 miles south-southwest of Cuba, New Mexico.
- <u>CASE 10479</u>: Application of Bird Creek Resources, Inc. for compulsory pooling, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the NW/4 NE/4 (Unit B) of Section 22, Township 23 South, Range 28 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent which presently includes but is not necessarily limited to the East Loving-Delaware Pool. Said unit is to be dedicated to a well to be drilled at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well. Said area is located approximately 1.75 miles east-northeast of Loving, New Mexico.
- <u>CASE 10480</u>: Application of Marathon Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Undesignated Lea-Wolfcamp Pool underlying the S/2 of Section 1, Township 20 South, Range 35 East, forming a standard 320-acre gas spacing and proration unit for said pool. Said unit is to be dedicated to the plugged and abandoned Amoco Production Company Selby Well No. 1 located at a standard gas well location 660 feet from the South line and 1980 feet from the West line (Unit N) of said Section 1. Also to be considered will be the cost of re-entering and recompleting said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in re-entering and recompleting said well. Said well is located approximately 9 miles west by south of Monument, New Mexico.
- <u>CASE 10481</u>: Application of Meridian Oil Inc. for a high angle/horizontal directional drilling pilot project, special operating rules therefor, a non-standard oil proration unit, and special project oil allowable, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal directional drilling pilot project in the Undesignated Gallegos-Gallup Associated Pool underlying the N/2 of Section 29, Township 26 North, Range 10 West, which is considered a standard 320-acre gas spacing and proration unit for said pool but is an unorthodox oil proration unit, all pursuant to the special pool rules as promulgated by Division Order No. R-5353, as amended. The applicant proposes to re-enter its Huerfano Unit Well No. 218, located at a standard surface location 800 feet from the North line and 790 feet from the West line (Unit D) of said Section 29, kick-off from vertical in an easterly direction until an angle of approximately 90 degrees is achieved and continue drilling horizontally for approximately 1250 feet. Applicant further seeks the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of said well's producing interval such that it can be no closer than 790 feet to the outer boundary of the aforementioned 320-acre spacing and proration unit and special allowable provisions are to be considered should said well be classified as an oil producer. Said unit is located approximately 5.5 miles northwest of the El Huerfano Trading Post on State Highway 44.

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CASE 10482: Application of Laguna Gatuna, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter the Pan American Petroleum Corporation Little Eddy Unit Well No. 1 (plugged and abandoned July, 1966) located 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 5, Township 20 South, Range 33 East, and utilize said wellbore to dispose of produced salt water into the Undesignated Gem-Bone Spring Pool through the perforated interval from approximately 9136 feet to 9188 feet, the Wolfcamp formation through the perforated interval from approximately 11,184 feet to 11,248 feet, and the Devonian formation through the openhole interval from 14,608 feet to 14,895 feet. Said well is located approximately 2 miles north of U.S. Highway 62/180 at mile marker No. 72.

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION POST OFFICE BOX 2088 SANTA FE, NEW MEXICO 87504

# PROPOSED RULES AND PROCEDURES FOR QUALIFICATIONS OF ENHANCED OIL RECOVERY PROJECTS AND CERTIFICATION FOR THE RECOVERED OIL TAX RATE

#### A. General

Applications for qualification of enhanced oil recovery projects or expansions of existing enhanced oil recovery projects for the recovered oil tax rate pursuant to the New Mexico "Enhanced Oil Recovery Act" (Laws 1992, Chapter <u>38</u>, Sections 1 through 5) shall be accepted by the Oil Conservation Division after March 6, 1992.

### **B.** Applicability

These rules apply to:

- 1. enhanced oil recovery (EOR) projects;
- 2. expansions of existing EOR projects;
- 3. the expanded use of enhanced oil recovery technology in existing EOR projects; and
- 4. the change from a secondary recovery project to a tertiary recovery project.

# C. Definitions

- 1. "Crude oil" means oil and other liquid hydrocarbons removed from natural gas at or near the wellhead.
- 2. "Division" means the Oil Conservation Division of the Energy, Minerals and Natural Resources Department.

- 3. "Enhanced Oil Recovery (EOR) Project" means the use or the expanded use of any process for the displacement of crude oil from an oil well or pool classified by the Division other than a primary recovery process, including but not limited to the use of a pressure maintenance process, a waterflooding process, an immiscible, miscible, chemical, thermal or biological process or any other related process.
- 4. "Expansion or Expanded Use" means a significant change or modification as determined by the Oil Conservation Division in (a) the technology or process used for the displacement of crude oil from an oil well or pool classified by the Division; or (b) the expansion, extension or increase in size of the geologic area or adjacent geologic area that could reasonably be determined to represent a new or unique area of activity.
- 5. "Operator" means the person responsible for the actual physical operation of an enhanced recovery project.
- 6. "Positive Production Response" means that the rate of oil production from the wells or pools affected by an enhanced recovery project is greater than the rate that would have occurred without the project.
- 7. "Primary Recovery" means the displacement of crude oil from an oil well or pool classified by the Division into the well bore by means of the natural pressure of the oil well or pool, including but not limited to artificial lift.
- 8. "Recovered Oil Tax Rate" means the tax rate, as set forth in Paragraph (3) of Subsection A of Section 7-29-4 NMSA 1978, on crude oil produced from an enhanced recovery project.
- 9. "Secondary Recovery Project" means an enhanced recovery project that: (a) occurs subsequent to primary recovery and is not a tertiary recovery project; (b) involves the application, in accordance with sound engineering principles of carbon dioxide miscible fluid displacement, pressure maintenance, waterflooding or any other secondary recovery method accepted and approved by the Division that can reasonably be expected to result in an increase, determined in light of all facts and circumstances, in the amount of crude oil that may ultimately be recovered; and (c) encompasses a pool or portion of a pool the boundaries of which can be adequately defined and controlled.
- 10. "Termination" means the discontinuance of an enhanced recovery project by the operator.

11. "Tertiary Recovery Project" means an enhanced recovery project that: (a) occurs subsequent to the completion of a secondary recovery project; (b) involves the application, in accordance with sound engineering principles, of carbon dioxide miscible fluid displacement, pressure maintenance, water flooding or any other tertiary recovery method accepted and approved by the Division that can reasonably be expected to result in an increase, determined in light of all facts and circumstances, in the amount of crude oil that may ultimately be recovered; and (c) encompasses a pool or portion of a pool the boundaries of which can be adequately defined and controlled.

### D. Procedure

- 1. The Division's general rules of procedure shall apply to applications for qualifications of EOR projects unless altered or amended by these rules.
- 2. To be eligible for the recovered oil tax rate the operator must apply for and be granted Division approval of a new EOR project or the expansion of an existing EOR project prior to the commencement of actual injection of fluids into the reservoir, provided, however, no project or expansion approved by the Division prior to March 6, 1992 shall qualify for the recovered tax rate.
- 3. All applications for approval of EOR projects or the expansion of EOR projects shall be filed in triplicate with the Division at its Santa Fe office. One copy of the application and all attachments shall also be filed with the appropriate Division's district office.
- 4. All applications shall be executed and certified by the operator or its authorized representative having knowledge of the facts therein and shall contain:
  - a. Operators name and address;
  - b. Description of the project area including:
    - (1) a plat outlining the project area;
    - (2) description of the project area by section, township and range;
    - (3) total acres; and
    - (4) name of the subject pool and formation.

- c. Status of operations in the project area:
  - (1) if unitized, the name of the unit and the date and number of the Division Order approving the unit plan of operation;
  - (2) if an application for approval of a unit plan has been made, the date the application was filed with the Division; and
  - (3) if not unitized, identify each lease in the project area by lessor, lessee and legal description.
- d. Method of recovery to be used:
  - (1) identify fluids to be injected;
  - (2) if the Division has approved the project, provide the date and number of the Division Order; and
  - (3) if the project has not been approved by the Division, provide the date the application for approval was filed with the Division on Form C-108.
- e. Description of the projection:
  - (1) number of producing wells;
  - (2) number of injection wells;
  - (3) capital cost of additional facilities;
  - (4) total project cost;
  - (5) the estimated total value of the additional production that will be recovered as a result of this project;
  - (6) anticipated date for commencement of injection;
  - (7) if application is made for an expansion of an existing project, explain what changes in technology will be used or what additional geographic area will be added to the project area.

- f. Production history: Provide graphs, charts and other supporting data to show the production history of oil, gas, casinghead gas, and water from the project area.
- 5. Upon receipt of the required information, the application will be set for hearing.

# E. Approval - Certification

- 1. <u>Project Approval</u>: An EOR project will be approved, a certification of approval issued and the project area designated for the recovered oil tax rate when the operator proves that:
  - a. the application of the proposed enhanced recovery techniques to the reservoir should result in an increase in the amount of crude oil that may be ultimately recovered therefrom;
  - b. the project area has been so depleted that it is prudent to apply enhanced recovery techniques to maximize the ultimate recovery of crude oil; and
  - c. the application is economically and technically reasonable and has not been prematurely filed.

# 2. <u>Positive Production Response Certification</u>:

- a. For the recovered oil tax rate to apply, to oil produced from a qualified EOR project, the operator must demonstrate a positive production response to the Division. Applications for certification of a positive production response shall be filed with the Division at its Santa Fe office and shall include:
  - (1) a copy of the Division's certification of approval of the enhanced recovery project or expansion;
  - (2) a plat of the affected area showing all injection and producing wells with completion dates;

- (3) production graphs and supporting data demonstrating a positive production response and showing the volumes of water or other substances that have been injected on the lease or unit since initiation of the enhanced recovery project.
- b. The Division Director shall have authority to administratively approve an application and certify a positive production response, or at his discretion or at the request of the applicant, may set the application for hearing.
- c. The Division shall certify that a positive production response has occurred and notify the Secretary of the Taxation and Revenue Department. This certification and notice shall set forth the date the certification was made and the date the positive production response occurred provided however:
  - (1) for a secondary recovery project, the positive production response must occur not later than five (5) years from the date the Division issued the certification of approval of the enhanced oil recovery project or expansion; and
  - (2) for a tertiary recovery project, the positive production response must occur not later than seven (7) years from the date the Division issues the certification of approval for the enhanced recovery project or expansion.

### F. Reporting Requirements

- 1. The operator of a certified EOR project shall report annually on the status of the project. The report will be for the year ending May 31 and shall be filed with the Division at its Santa Fe office. The report shall contain:
  - a. The date and number of the Division's certification order for the project.
  - b. Production graphs showing oil, gas and water production.
  - c. A graph showing the volumes of fluid injected and the average injection pressures.
  - d. Certification that the project is still a viable EOR project as approved.

e. Any additional data the Director deems necessary for continued approval; further the Director may set any such application for hearing would it appear necessary.

# G. Termination

- 1. When active operation of an approved enhanced recovery project or expansion is terminated, the operator shall notify the Division and the Secretary of Taxation and Revenue in writing not later than the thirtieth (30th) day after the termination of the enhanced recovery project or expansion.
- 2. Qualification for the recovered oil tax rate ends on the first day of the first calendar month that begins on or after the ninety-first day following the termination of the enhanced recovery project or expansion.