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

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

APPLICATION OF FAE II OPERATING LLC FOR APPROVAL OF AN ENHANCED OIL RECOVERY PROJECT AND TO QUALIFY THE PROJECT FOR THE RECOVERED OIL TAX RATE, LEA COUNTY, NEW MEXICO.

CASE NO. 25221
ORDER NO. R-24506

ORDER OF THE DIVISION

This case came in for hearing before the Oil Conservation Division ("OCD") at 9:00 a.m. on July 29, 2025, in Santa Fe, New Mexico.

The OCD Director, having considered the testimony, the record, the recommendations of Hearing Examiner, these findings of fact, and conclusions of law, issues this Order.

FINDINGS

1. Due public notice has been given and the OCD has jurisdiction of this case and its subject matter.

2. Case Nos. 25220 and 25221 were consolidated for purposes of hearing. A separate order will be entered in Case No. 25220.

3. In Case No. 25221, FAE II Operating, LLC. ("FAE" or "Applicant") filed the application for an order approving an enhanced oil recovery ("EOR") project and qualifying the project for the EOR project tax incentive provided in 19.15.6.8 NMAC.

4. Applicant filed its application on February 11, 2025, and the OCD set this application for Division hearing on March 13, 2025, but subsequently was continued to the hearing scheduled for April 10, 2025.

5. On April 11, 2025, Oxy USA Inc. and Occidental Permian LP filed a Notice of Objection to the hearing proceeding by Affidavit.

6. On April 24, 2025, the OCD Hearing Examiner issued a pre-hearing order for a contested hearing to commence on July 29, 2025.

7. On July 22, 2025, Oxy USA Inc. and Occidental Permian LP withdrew their objections to the hearing proceeding by affidavit.

8. With the resolution of the objections, the application was presented by affidavit at Division hearing on July 29, 2025.

9. Applicant appeared at the hearing through counsel and presented the following testimony in support of the proposed ER project:

a. Applicant is a working interest owner in the proposed Lamunyon Unit, which comprises approximately 3,960 acres, more or less, of the following federal and fee lands located in Lea County, New Mexico (the "Unit Area"):

Township 23 South, Range 37 East, NMPM
Section 20: E/2
Section 21: All
Section 22: W/2 and SW/4 SE/4
Section 27: All
Section 28: All
Section 29: E/2 NE/4
Section 33: E/2
Section 34: All
Section 35: W/2

b. The Unitized Formation is to be defined as the "interval underlying the Unit Area, the vertical limits of which extend from an upper limit described as the top of the Glorieta formation to a lower limit at the base of the Blinebry formation; the geologic markers having previously found to occur at 4,921 feet and 5,930 feet, respectively, in Chevron U.S.A. Inc's C.E Lamunyon No. 50, API No. 30-025-30525, located 1310 feet FNL and 210 feet FEL of Section 28, T. 23 S., R. 37 E., NMPM, Lea County, New Mexico, as recorded on the Schlumberger Compensated Neutron Litho-Density log run on March 6, 1989 and measured from a Kelly Bushing Elevation of 3,298 feet above sea level"

c. Applicant will be the operator of the EOR project.

d. Applicant proposed to institute an EOR project (secondary and tertiary recovery) in the Unit Area through the injection of water and gas (carbon dioxide).

e. Applicant proposes to initially inject water into the Glorietta, Paddock, and Blinebry formations through the following existing wells, to be converted into injection wells ("Wells"):

	Well Name and Number	API No.	Surface Location*	Perforation Depths
1	C E Lamunyon No. 53	30-025-33136	1,300 ft FSL and 330 ft FWL (Unit M), Section 22	5,270 ft to 5,330 ft
2	Saltmount No. 3	30-025-33228	990 ft FSL and 1300 ft FEL (Unit P), Section 21	5,290 ft to 5,340 ft
3	C E Lamunyon No. 57	30-025-33445	2,310 ft FNL and 1,200 ft FWL (Unit E), Section 27	5,384 ft to 5,852 ft
4	C E Lamunyon No. 64	30-025-33961	50 feet FNL and 1,340 feet FWL (Unit C), Section 27	5,274 ft to 5,312 ft
5	C E Lamunyon No. 63Y	30-025-34153	1,420 ft FNL and 1,340 ft FWL (Unit F), Section 27	5,280 ft to 5,330 ft
6	C E Lamunyon No. 66	30-025-34202	1,300 ft FNL and 2,520 ft FWL (Unit C), Section 27	5,306 ft to 5,359 ft
7	C E Lamunyon No. 68	30-025-34254	10 ft FNL and 330 ft FWL (Unit D), Section 27	5,362 ft to 5,396 ft
8	C E Lamunyon No. 76	30-025-35074	2,310 ft FNL and 2,310 ft FWL (Unit F), Section 27	5,290 ft to 5,345 ft

*All wells located in Township 23 South, Range 37 East, NMPM; ft is feet.

f. FAE plans to inject water through a closed system of perforations within the Glorieta, Paddock, and Blinebry formations. The proposed average injection pressure is expected to be approximately 950 pounds per square inch ("psi"). The expected maximum injection pressure will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. Pending results of a step rate test, the maximum injection pressure could potentially be increased to a factor of 0.65 psi/ft (or 3,210 psi at 4,938 feet and 3,520 psi at 5,412 feet).

g. The proposed daily injection rate will be 800 barrels of water per day ("BWPD") with a maximum injection rate of 1,600 BWPD or as permitted by the OCD.

h. Additional injection wells will be drilled on an ongoing basis. The injection wells within the Unit Area are anticipated to be a combination of existing well conversions and new drills.

i. Applicants seeks authorization to add injection wells to the project administratively, including wells that are converted and wells that will be used for the injection of gas.

j. Applicant identified the active freshwater wells within one mile of the proposed injection wells. A total of eight (8) shallow freshwater wells within one mile of the Wells listed in Findings Paragraph (9)(e). FAE provided water sample results for two of the identified freshwater wells which included a representative sample for a local USDW aquifer, the Santa Rosa formation.

k. Applicant provided the analytical results for the proposed injection water to be obtained from the Lamunyon central tank battery unit. The results show compatibility for use of the produced water from the Unit as injection fluid for the Project.

10. Applicant requests that the EOR project for the Unit Area be qualified for the recovered oil tax rate, pursuant to the Enhanced Oil Recovery Act, NMSA 1978, Sections 7-29A-1 to -5, and NMAC. The summary data for the project:

a. Number of initial producing wells: 88

b. Number of initial injection wells: 8

c. Number of injection wells at full development: 76

d. Capital costs of initial additional facilities: $1.58 million ("MM")

e. Estimated total initial project cost: $8.29 MM

f. Estimated value of incremental production: $51 MM PV10 (full development)

g. Estimated injection commencement date: within one year of Unit approval

h. Type of injected fluid: Produced water

i. Produced water will be injected into the Unitized Formation as described in Findings Paragraph 9(b).

j. Specifications and wellbore schematics for the Wells are provided in the Form C-108 which was filed with the case application. All injection wells will be adequately equipped for injection, and the construction of the wells will protect fresh water and other hydrocarbon-bearing zones.

k. The proposed average injection pressure through the Wells in the Project Area is expected to be approximately 950 psi. The expected maximum injection pressure

will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. The proposed Unit Area wells will have perforation depths between approximately 4,921 ft to 5,930 ft (985 psi to 1,185 psi maximum injection pressure, respectively). Pending results of a step rate test, the maximum injection pressure could potentially be increased to 0.65 psi/ft (3,200 psi at 4,921 ft to 3,855 psi at 5,930 ft).

l. FAE proposes to acidize the Wells with approximately 100 gallons of 15% hydrochloric acid and flush with approximately 10 barrels of water per foot of perforations. Applicant stated that acidizing each set of well perforations will break down well perforations and cause injection at lower pressures to maximize injection rates. The stimulation of the Wells will not utilize proppants.

m. Applicant stated that injection operations within the Unit are economically and technically feasible and that it is prudent to utilize secondary recovery operations to maximize oil recovery.

n. Applicant will conduct an MIT test prior to commencing injection and will monitor pressure during injection.

11. The OCD Technical Examiner identified four plugged and abandoned wells within the Area of Review ("AOR") for the proposed injection wells which do not satisfy the requirement for "sealing off strata" as stipulated in NMAC 19.15.16.9. OCD has identified inadequate cement in the annular space of the four wells resulting in the Glorieta formation being in communication with the Queen and San Andres formations **which shall require remediation prior to commencing secondary recovery operations.** The four wells are as follows:

a. **C E Lamunyon No. 71** (API No. 30-025-35058) located in Unit E, Sec. 27, T.23 S., R.37 E, NMPM

b. **C E Lamunyon No. 13** (API No. 30-025-10857) located in Unit F, Sec. 27, T.23 S., R.37 E, NMPM

c. **C E Lamunyon No. 6** (API No. 30-025-10863) located in Unit A, Sec. 28, T.23 S., R.37 E, NMPM

d. **C E Lamunyon No. 12** (API No. 30-025-10856) located in Unit E, Sec. 27, T.23 S., R.37 E, NMPM

12. The OCD Technical Examiner referenced the exhibit package and the uplift in production which occurred from 1992 to 1996. The Examiner questioned whether the uplift could be related to crossflow from produced water disposal in the San Andres formation through the four wells with open annulus. FAE confirmed that the uplift was associated with re-completion operations and an infill program in the 1990's.

Furthermore, water sampling and compatibility testing confirmed that the water was from the Blinebry formation and not representative of other formations.

CONCLUSIONS OF LAW

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject water for operation of an EOR project.

2. Based upon empirical data from analogue fields, the operation of the proposed EOR project will increase the ultimate recovery from the Lamunyon Unit.

13. Exhibits and testimony regarding the proposed EOR project support the following observations:

a. With the exception of the wells with open annulus identified by OCD, fluid injection will be contained stratigraphically above and below the injection interval.

b. Results from analogue fields and core studies suggest the unit can be successfully waterflooded using a five-spot or line-drive flood pattern.

c. Gas-oil ratio parameters confirm the reservoir is classified as an oil reservoir.

d. The reservoir does not have a distinct oil-water-contact, but FAE has defined the depth of lowest-known-oil to estimate net pay.

e. Injections associated with secondary recovery operations will be stratigraphically isolated from, and will not impact, shallow groundwater.

f. Injection operations associated with secondary recovery are not expected to contribute to induced seismicity.

3. The proposed EOR project will, in reasonable probability, result in production of substantially more hydrocarbons from the Unit that would otherwise not be recovered without the implementation of the proposed project.

4. Applicant complied with the notice requirements of 19.15.4 NMAC.

5. With the exception of the identified wells in Finding Paragraph 11, Applicant provided evidence that the existing wells within the AOR are sufficiently cased and cemented. The operation of the proposed EOR project will not impact fresh water or underground sources of drinking water contingent on the remediation of four wells within the AOR required to satisfy 19.15.16.9 NMAC.

6. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.

7. Applicant is in compliance with 19.15.5.9 NMAC.

8. FAE presented exhibits containing the information required by Division rules to qualify this project under the Enhanced Oil Recovery Act.

9. Approval of this application is in the best interests of conservation, the prevention of waste and the protection of correlative rights. Accordingly, the application should be approved.

ORDER

1. The application of FAE II Operating, LLC ("FAE" or "Operator") to authorize injection of produced water for enhanced oil recovery ("EOR") within the Lamunyon Unit is approved. The operation is designated the **Lamunyon Unit Enhanced Recovery Project** ("Project").

2. The project area is the same acreage ("Unit Area") approved for the Statutory Unitization in Division Order No. R-24505 (Case No. 25220) and comprises 3,960 acres, more or less, of federal and fee lands in Lea County, New Mexico:

Township 23 South, Range 37 East, NMPM
Section 20: E/2
Section 21: All
Section 22: W/2 and SW/4 SE/4
Section 27: All
Section 28: All
Section 29: E/2 NE/4
Section 33: E/2
Section 34: All
Section 35: W/2

3. The Unitized Formation for the Project shall be the same as approved in Ordering Paragraph (3) of Division Order No. R-24505.

4. FAE II Operating, LLC (OGRID No. 329326) shall be the designated operator of the Project.

5. FAE is authorized to inject water through a closed system of perforations within the Unitized Formation for the purpose of secondary recovery. Approval of injection operations in the Glorieta formation shall be subject to approval of the vertical expansion of the Teague; Paddock-Blinebry pool (pool code 58300).

6. Injection shall be accomplished through 2-3/8 inch or 2-7/8 inch internally plastic lined tubing or equivalent installed in a packer to be set within 100 feet of the top perforation. The casing-tubing annulus should be filled with an inert fluid, and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

7. All injection wells shall be equipped with a pressure control device or acceptable substitute that will limit the injection well below the maximum surface injection pressure ("MSIP") defined in Ordering Paragraph (8) and with an injection rate not to exceed the conditions listed in Ordering Paragraph (9).

8. The MSIP shall be calculated for each injection well using the administrative pressure gradient of 0.2 psi/foot calculated using the depth of the uppermost perforation. OCD may administratively authorize an increase in the maximum surface injection pressure upon a showing by the Operator that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

9. The maximum daily injection rate shall be 1,600 barrels of water per well subject to (1) the production rate from pattern-supported production wells being suitably balanced to prevent waste and (2) the MSIP approved for the specific injection well. The maximum injection rate may be increased if it is deemed to improve recovery from the unitized interval subject to and supported by optimized depletion studies, history-matching or equivalent technical analysis and step rate testing.

10. The use of gas (either produced gas or carbon dioxide) as an injection fluid is not approved for this EOR project.

11. FAE is authorized to convert eight (8) producing wells described in Findings Paragraph (8)(e) to injection wells to implement an EOR project. The injection wells are as follows:

Well	API Number	Well Name	Current Tubing Size (inches)
1	30-025-33136	C E Lamunyon No. 53	2 ⅜
2	30-025-33228	Saltmount No. 3	2 ⅜
3	30-025-33445	C E Lamunyon No. 57	2 ⅜
4	30-025-33961	C E Lamunyon No. 64	2 ⅜
5	30-025-34153	C E Lamunyon No. 63Y	2 ⅜
6	30-025-34202	C E Lamunyon No. 66	2 ⅜
7	30-025-34254	C E Lamunyon No. 68	2 ⅞
8	30-025-35074	C E Lamunyon No.76	2 ⅜

12. The Operator shall take all steps necessary to ensure that the injected fluid enters only the injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

13. Prior to commencing injection operations, Operator shall ensure the requirements for the proper sealing of strata is satisfied in accordance with 19.15.16 NMAC. FAE shall remediate the wells in accordance with their re-entry commitments as communicated to the OCD through e-mail correspondence dated April 20, 2026. The re-entry plans for the wells are as follows:

a. C E Lamunyon No. 6 (API No. 30-025-10863), C E Lamunyon No. 12 (API No. 30-025-10856) and C E Lamunyon No. 13 (API No. 30-025-10857) are planned for re-entries as part of the proposed McGee Waterflood projects (Case No. 22593). As part of those operations, the Operator will run cement bond logs to verify vertical isolation across the proposed Lamunyon Unit interval. If isolation is not confirmed, remedial cement squeeze work will be performed to establish isolation.

b. C E Lamunyon No. 71 (API No. 30-025-35058) is not currently part of a development plan and would be re-entered specifically to evaluate and ensure vertical isolation.

c. For re-entry of plugged and abandoned wells, Operator shall be required to file the appropriate Form C-101 or federal equivalent to be approved by the OCD.

d. All documents and results of remedial activities shall be filed with the OCD prior to commencing injection in the Project.

14. To satisfy the Mechanical Integrity Testing ("MIT") requirements of 19.15.26.11(A) NMAC, Operator shall comply as follows:

a. Prior to commencing injection operations FAE must perform an MIT on each injection well, with subsequent MIT testing at least once every five years thereafter. OCD shall be notified at least 48 hours prior to performing a MIT and given the opportunity to witness the test.

b. An acceptable MIT shall be required prior to resumption of injection each time either the packer is unseated and/or tubing is removed from any injection well operating within the Unit.

15. The OCD Director retains the right to require, at any time, wireline verification of completion and packer setting depths.

16. Without limitation on the duties of the Operator as provided in OCD rules, or otherwise, the Operator shall immediately notify the Inspection Supervisor and OCD Engineering e-mail of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

17. To be eligible for the EOR tax rate and satisfy 19.15.26.12A NMAC, the Operator shall provide written notice, using a C-103Z for each injection well, of the date on which injection commences within the Project.

18. The Project shall be governed by Rules 19.15.26.8 through 19.15.26.15 NMAC except where modified by this Order. The Operator shall submit monthly reports of the injection operations on Form C-115, in accordance with Rules 19.15.26.13 and 19.15.7.28 NMAC. The monthly reports shall include the volume of injected fluid, the days of operation, and the maximum injection pressure recorded during the month of operation.

19. At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the Operator shall apply to OCD using Engineering e-mail for certification of a positive production response. This application shall identify the area benefitting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The OCD shall review the application either for administrative approval or set it for hearing, if necessary. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

20. The area to be affected by the enhanced oil recovery project shall consist of the area within the Lamunyon Unit. Provided, the area and/or the producing wells eligible for the enhanced oil recovery tax rate may be contracted or expanded based upon the evidence presented by the unit operator in its demonstration of a positive production response.

21. Due to costs and timing associated with implementing the Project and remediating the annular isolation in four wells, Operator shall be granted an exception from 19.15.26.12(C) NMAC and Operator shall be authorized to initiate the first injection into

any of the approved wells within two (2) years of approval of this Order. Additionally, FAE may seek an extension of time of this Order by filing a written request showing good cause prior to the deadline to commence injection within the Project.

22. If hydrogen sulfide ("H_2S") is observed in any well within the Project, Operator shall submit a H_2S contingency plan as required in 19.15.11 NMAC for approval by the OCD.

23. The OCD Director may administratively authorize additional injection wells within this Unit after proper notice and opportunity for hearing as provided in 19.15.26.8 NMAC with the provision that all injection wells shall conform to the following requirements and the Operator is in compliance with Rule 19.15.5.9 NMAC.

24. The OCD may revoke any injection permit after notice and hearing if the Operator is in violation of 19.15.5.9 NMAC.

25. Compliance with this order does not relieve the Operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

26. Jurisdiction is retained by the OCD for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order; whereupon the OCD may, after notice and hearing or prior to notice and hearing in event of an emergency, terminate the injection authority granted herein.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Albert Chang

ALBERT C.S. CHANG
DIVISION DIRECTOR

Date: 08/14/2026

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