OCD Exhibit 25

STATE OF NEW MEXICO
NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF OIL CONSERVATION DIVISION
TO ADOPT 19.15.41, 19.15.42, AND 19.15.43 NMAC **No. 25875**

REBUTTAL TESTIMONY OF MATT EALES
ON BEHALF OF THE OIL CONSERVATION DIVISION

JULY 13, 2026

Q. DID YOU PROVIDE DIRECT WRITTEN TESTIMONY IN THIS MATTER AND HAVE YOU PROVIDED A COPY OF YOUR RESUME/CV AS AN EXHIBIT?

A. Yes, my direct written testimony was submitted as OCD Exhibit 12 and my resume summarizing my qualifications and experience was provided as OCD Exhibit 13.

Q. HAVE YOU REVIEWED THE DIRECT WRITTEN TESTIMONY AND ASSOCIATED EXHIBITS OF THE CENTER FOR BIOLOGICAL DIVERSITY ("CBD") AND OXY USA INC ("OXY") TO PREPARE THIS WRITTEN REBUTTAL TESTIMONY?

A. Yes.

Q. HAVE YOU REVIEWED THE DIRECT WRITTEN TESTIMONY AND ASSOCIATED EXHIBITS FOR DINE C.A.R.E., EARTHWORKS, SAN JUAN CITIZENS ALLIANCE, SIERRA CLUB RIO GRANDE CHAPTER, TO NIZHONI ANI AND WESTERN ENVIRONMENTAL LAW CENTER'S (COLLECTIVELY "CONSERVATION GROUPS") TO PREPARE THIS WRITTEN REBUTTAL TESTIMONY?

A. Yes.

Centers for Biological Diversity Rebuttal

Q. CBD PROPOSES A CHANGE TO THE REQUIRED CLASS VI PERMIT INFORMATION REGARDING NON-PHYSICAL REVIEW.[1] WHAT IS YOUR RESPONSE?

[1] CBD Exhibit 1 at 6

A. The proposed New Mexico Class VI program already requires an applicant to identify all wells within the Area of Review and an applicant is not limited to searching only within the existing robust NMOCD well database. The level of prescriptiveness proposed by CBD is not necessary within the regulatory language because the proposed rules need flexibility to address tabulation of all wells within the area of review on a case-by-case basis

Q. CBD PROPOSES A CHANGE TO THE MINIMUM CRITERIA FOR SITING CLASS VI WELLS REGARDING PUBLIC SPACES.[2] WHAT IS YOUR RESPONSE?

A. In my opinion, the minimum siting criteria and setback requirements proposed by CBD are not necessary components of the Class VI technical permitting framework. From a technical perspective, the primary considerations in evaluating a Class VI permit application are whether the proposed injection zone is suitable for geologic sequestration, whether the confining system will effectively contain the injected carbon dioxide plume and associated pressure front, and whether underground sources of drinking water will be protected through appropriate well construction, casing and cementing design, operational controls, monitoring, and corrective action measures. The additional siting criteria and setback requirements proposed by CBD do not directly relate to these core technical evaluations and are not necessary to determine whether a proposed Class VI well can be constructed, operated, monitored, and closed in a manner that protects underground sources of drinking water.

[2] CBD Ex. 1 at 8

Q. CBD PROPOSES A CHANGE TO THE AREA OF REVIEW AND CORRECTIVE ACTION REGARDING WELL PLUGGING.[3] WHAT IS YOUR RESPONSE?

A. The proposed Class VI regulation already contains language for the Area of Review which includes the requirement to ensure protectiveness of the USDW and to prevent the movement of fluids between geologic formations. These requirements inherently require that any well within the Area of Review requiring corrective action, including plugging or remediation, be addressed in a manner that maintains the integrity of the confining system and prevents communication between formations.

In my opinion, these existing performance-based requirements already provide the Division with the authority and flexibility to require appropriate corrective action based on the site-specific characteristics of a project. The additional language proposed would prescribe specific requirements that are already addressed through the existing Area of Review and corrective action framework.

Q. CBD PROPOSES CHANGES TO THE LOGGING, SAMPLING, AND TESTING PRIOR TO INJECTION WELL OPERATIONS.[4] WHAT IS YOUR RESPONSE?

A. The additional language provided recommending adding sonic and porosity measurement before installation of the surface casing is acceptable from a technical perspective because it can provide useful information for characterizing subsurface conditions.

I do, however, have concerns regarding the use of the term "best available technology." That phrase is not defined in this regulatory context and could be interpreted to include

[3] CBD Ex. 1 at 9
[4] CBD Ex. 1 at 14

technologies that are still experimental, or have not been demonstrated to be reliable under field-scale Class VI operating conditions.

Q. CBD PROPOSES A CHANGE TO INJECTION WELL OPERATING REQUIREMENTS TO INCLUDE A RAMP-UP OF FIVE DAYS DURING THE INITIATION OF INJECTION.[5] WHAT IS YOUR RESPONSE?

A. A requirement to ramp up a well over a period of 5 days is too prescriptive and could inherently introduce unintended negative consequences dependent upon situation. A performance-based approach that allows startup procedures to be established through site-specific permit conditions would provide greater flexibility while continuing to ensure the protection of underground sources of drinking water.

Q. CBD PROPOSES A CHANGE TO MECHANICAL INTERGRITY REGARDING ADDITIONAL NOISE METHODS[6], WHAT IS YOUR RESPONSE?

A. A requirement to perform a noise log annually for every Class VI well is not technically necessary because the Class VI mechanical integrity testing program is already designed to identify potential well integrity concerns. Conducting an annual noise log would also require the well to be shut down for a period of time, which may result in operational disruptions without providing additional technical value in every case. If an issue is detected, there are many testing methods that can be used to seek out the specific issue which includes the referenced noise logs. The specific reference to a specific type of noise log in lieu of standard wireline deployed noise logs is too prescriptive.

[5] *Id*. at 15
[6] *Id*. at 16

Q. CBD PROPOSES AN ADDITION TO THE TESTING AND MONITORING REQUIREMENTS WITH AN INCLUSION OF REPEATED RESISTIVITY LOGGING OR PERMANENT RESISTIVITY BOREHOLE ARRAYS AND AMBIENT NOISE TOMOGRAPHY.[7] WHAT IS YOUR RESPONSE?

A. The additional references to repeated resistivity logging or permanent resistivity borehole arrays are too prescriptive and are not more protective as other technologies may be more appropriate for particular conditions. In addition, the ambient noise tomography reference is also too prescriptive and not more protective as the mechanical integrity requirements already set a robust means of assuring that the well is completed and injecting in a safe manner. The requirement for isotopic determination of CO2 source is unnecessary in that the proposed regulations already require that the CO2 is measured and changes require research and response for identified issue. In addition, an operator may not have access to the greater AoR to perform ongoing surface testing until the permit is issued.

Q. CBD PROPOSES CHANGES TO EMERGENCY AND REMEDIAL RESPONSE, INCLUDING TEMPORARILY CEASING INJECTIONS AND TRAINING FOR LOCAL EMERGENCY RESPONDERS.[8] WHAT IS YOUR RESPONSE?

A. The specific training requirements added to the regulation are too prescriptive, especially for the emergency response teams at the state, county and city level. These entities have robust training requirements which include multi-scenario response in their areas. The proposed Class VI regulations for an emergency response plan is sufficiently robust and

[7] *Id*. at 17
[8] *Id*. at 23

allows for area emergency responders to build upon the initial requirements in the manner that they feel meets their local conditions.

Conservation Groups Rebuttal

Q. THE CONSERVATION GROUPS PROPOSE A CHANGE TO TRANSITIONING FROM CLASS II TO CLASS VI WELLS REGARDING AN ADDITION FOR THE DIRECTOR TO CONSIDER THE INTEGRITY OF THE CAPROCK SEAL FOR LONG-TERM CONTAINMENT.[9] WHAT IS YOUR RESPONSE?

A. In my opinion, the proposed requirement is not technically necessary because the Class VI regulations already require a comprehensive evaluation of well design, construction, testing, operation, and monitoring to ensure that injected carbon dioxide remains confined within the approved injection zone and that underground sources of drinking water are protected. A fundamental component of those requirements is demonstrating the presence and effectiveness of an adequate confining system, including a competent caprock seal. This proposal is unnecessarily prescriptive because it identifies a specific expectation that is already incorporated within the broader Class VI technical requirements.

Q. THE CONSERVATION GROUPS PROPOSE STRIKING SELF INSURANCE FROM FINANCIAL RESPONSIBILITY.[10] WHAT IS YOUR RESPONSE?

A. In my opinion, allowing self-insurance as one of the acceptable financial responsibility mechanisms provides an additional means of demonstrating financial assurance that can be protective of New Mexico's interests. For certain entities, particularly those with

[9] Conservation Groups Exhibit 1-B at 18
[10] Conservation Group Exhibit 1-C at 36

substantial financial resources and demonstrated financial stability, self-insurance may provide financial assurance that is equal to or greater than that available through third-party insurance products.

Q. THE CONSERVATION GROUPS PROPOSE TO ADD MONTHLY CASING INSPECTION LOGS TO MECHANICAL INTEGRITY REQUIREMENTS.[11] WHAT IS YOUR RESPONSE?

A. In my opinion, requiring routine casing inspection logs in addition to the annual mechanical integrity testing required for Class VI wells is not technically necessary in every case. The proposed Class VI mechanical integrity testing program already provides a comprehensive means of evaluating whether the well maintains internal and external mechanical integrity and whether conditions exist that could threaten containment or protection of underground sources of drinking water. In addition, a casing inspection log requires the removal of the tubing which is required for the injection of the injectate. The well would have to stop injection for several days every month to trip in and out the tubing in order to perform this inspections. If required on a frequent or routine basis, these activities could result in repeated shutdowns lasting several days and could introduce additional operational risks associated with repeatedly tripping tubing in and out of the well.

Q. THE CONSERVATION GROUPS PROPOSE TO ADD A REQUIREMENT THAT AN OPERATOR PUCHASE A STATE-OWNED DISTRIBUTED ACOUSTIC NETWORK OF SEISMIC SENSORS.[12] WHAT IS YOUR RESPONSE?

[11] *Id*. at 42
[12] *Id*. at 44

A. Current OCD practice requires that an operator use a New Mexico Bureau of Geology-approved seismometer and connect it to the New Mexico Bureau of Geology public system so that it is visible to the public. This seismometer then becomes part of the greater New Mexico acoustic network of seismic sensors. New Mexico does not require that the state own these seismometers, only that it meets the equipment and communication requirements.

Q. THE CONSERVATION GROUPS PROPOSE TO ADD A SEISMIC THRESHOLD METRIC USING PEAK GROUND VELOCITY OR PEAK GROUND ACCELERATION.[13] WHAT IS YOUR RESPONSE?

A. In my opinion, specifying peak ground velocity or peak ground acceleration as mandatory statewide seismic threshold metrics is unnecessarily prescriptive. The proposed Class VI regulations already require a comprehensive seismic monitoring program that is designed to identify and evaluate seismic events that may affect injection operations, well integrity, or the protection of underground sources of drinking water.

Q. THE CONSERVATION GROUPS PROPOSE TO ADD GAUGE MALFUNCTION AND INSTRUMENTATION FAILURE TO THE REPORTING REQUIREMENTS FOR EACH PERMITTED CLASS VI WELL.[14] WHAT IS YOUR RESPONSE?

A. In my opinion, the proposal from the Conservation Groups would benefit from additional clarification because the term "malfunction" is not defined. From an operational perspective, the term could encompass a wide range of events, including brief interruptions in data transmission, temporary instrument communication issues, or other minor

[13] *Id*.
[14] *Id*. at 45

equipment irregularities that do not affect the performance of the monitoring system or the protection of underground sources of drinking water.

Without additional definition or materiality thresholds, the proposed language could require notification of routine or minor operational issues that do not indicate a failure of the monitoring program or a threat to well integrity or containment.

Additionally, the proposed Class VI regulations already establish comprehensive monitoring requirements and identify the circumstances under which operators must monitor, evaluate, and report conditions affecting the safe operation of the well and the protection of underground sources of drinking water. Those existing provisions provide the Division with the information necessary to oversee Class VI operations without requiring notification of every minor equipment or communication issue that may occur during routine operations.

Q. THE CONSERVATION GROUPS PROPOSE TO ADD THAT AN EMPLOYEE BE PHYSICALLY PRESENT ON THE PREMISES FOR PURPOSES OF EMERGENCY AND REMEDIAL RESPONSE.[15] WHAT IS YOUR RESPONSE?

A. In my opinion, requiring the continuous physical presence of personnel at a Class VI injection site is unnecessarily prescriptive because modern Class VI facilities are designed with automated monitoring systems, alarms, and automatic shutdown capabilities that provide continuous oversight of critical operating parameters. From a technical perspective, the objective is to ensure that injection operations are continuously monitored and that any condition affecting well integrity or the protection of underground sources of drinking water is promptly identified and addressed. That objective can often be achieved

[15] *Id*. at 49

more effectively through continuous automated monitoring and control systems than by requiring the constant physical presence of personnel at the well site.

Q. THE CONSERVATION GROUPS PROPOSE TO ADD ADDITIONAL REQUIREMENTS TO WHEN AN OPERATOR MUST CEASE INJECTION, INCLUDING A SIGNIFICANT SEISMIC EVENT AMONG OTHERS.[16] WHAT IS YOUR RESPONSE?

A. In my opinion, the proposal from the Conservation Groups is unnecessarily prescriptive because it limits the flexibility needed to respond to the site-specific conditions that may arise during the operation of a Class VI well. The appropriate decision to suspend or terminate injection should be based on the totality of the available technical information, including monitoring results, operational conditions, well integrity, reservoir performance, and the potential for impacts to underground sources of drinking water. Additionally, the proposed Class VI regulation already has contemplated the ability of the Director to shut down injection if the Director deems it necessary, without limiting the Director to specific situations.

Oxy Rebuttal

Q. OXY PROPOSES TO EXTEND THE PERMIT TO CONSTRUCT A CLASS VI WELL FROM TWO YEARS TO FIVE YEARS.[17] WHAT IS YOUR RESPONSE?

A. In my opinion, the existing two-year construction period is appropriate and is consistent with standard permitting practices for complex infrastructure projects. A two-year construction period provides permittees with a reasonable amount of time to begin

[16] *Id*.
[17] Oxy Exhibit 1A at 7

construction while also ensuring that the technical information supporting the permit remains current.

Q. OXY PROPOSES TO ADD THAT NON-MATERIAL NON-SUBSTANTIVE PERMIT MODIFICATIONS THAT DO NOT INCREASE RISK TO USDWS MAY BE CONSIDERED FOR MINOR MODIFICATIONS OF PERMITS.[18] WHAT IS YOUR RESPONSE?

A. In my opinion, the proposed language by Oxy would benefit from additional clarification because the phrase "increase risk to underground sources of drinking water" is not defined and could be interpreted differently in different circumstances. Additionally, the proposed Class VI regulations already provide a framework for minor permit modifications and allow the Division to evaluate proposed changes based on the site-specific facts. In my opinion, introducing this additional undefined standard could create uncertainty in applying those existing modification categories without providing additional technical benefit.

Q. OXY PROPOSES TO STRIKE NET WORKING CAPITAL FROM FINANCIAL RESPONSIBILITY REQUIREMENTS.[19] WHAT IS YOUR RESPONSE?

A. In my opinion, allowing net working capital to be considered as part of a financial responsibility demonstration provides additional flexibility for applicants, particularly smaller companies that may have sufficient financial resources but utilize different financing structures. At the same time, I recommend retaining consistency with EPA's existing Class VI financial responsibility framework where appropriate.

[18] Oxy Exhibit 1B at 12
[19] Oxy Exhibit 1C at 10

Q. OXY PROPOSES TO REMOVE SPONTANEOUS POTENTIAL FROM SURFACE CASING REQUIREMENTS, AND ALSO PROPOSES TO MAKE SOME OF THE LOGS AND TESTS OPTIONAL RATHER THAN REQUIRED.[20] WHAT IS YOUR RESPONSE?

A. In my opinion, removing the requirement for spontaneous potential logging as part of the surface casing logging requirements is not appropriate because that requirement is already included in the federal Class VI regulations. Retaining this requirement promotes consistency with the federal program and ensures that the information used to characterize subsurface conditions remains consistent with the technical framework established by EPA. At the same time, I do not believe the regulations should attempt to identify every available logging or testing technology. There are numerous logging methods currently available, and new technologies continue to be developed and refined.

Q. OXY PROPOSES TO ADD THAT INJECTION OF CARBON DIOXIDE MUST IMMEDIATELY STOP "IN THE IMPACTED WELL" IF THE OPERATOR OBTAINS EVIDENCE THAT IT MAY CAUSE AN ENDANGERMENT TO A USDW. [21]WHAT IS YOUR RESPONSE?

A. I agree with the objective of the proposed language, which is to ensure that injection operations do not endanger an underground source of drinking water. In my opinion, however, the proposed revision is unnecessary because the draft proposed regulations already provide the Director with the authority to require the suspension or cessation of

[20] *Id*. at 12-13
[21] *Id*. at 21

injection whenever monitoring results or other information indicate that continued injection may endanger an underground source of drinking water.

Q. OXY PROPOSES TO CHANGE THE PERIODIC REVIEW OF THE EMERGENCY AND REMEDIAL RESPONSE PLAN FROM EVERY THREE YEARS TO EVERY FIVE YEARS.[22] WHAT IS YOUR RESPONSE?

A. This is a reasonable request for a periodic review to be held every five years instead of every three years as there should not be significant changes expected in the emergency and remedial response plans that would necessitate an earlier review.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

[22] *Id*.