

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

**AMENDED APPLICATION OF OIL CONSERVATION
DIVISION TO ADOPT 19.15.41, 19.15.42, and
19.15.43 NMAC; STATEWIDE**

CASE NO. 25875

OXY'S DEMONSTRATIVE EXHIBITS

Pursuant to the Prehearing Procedural Order issued in this matter on June 8, 2026, OXY USA Inc. ("Oxy") hereby files its Demonstrative Exhibits in this matter

Respectfully submitted,

HOLLAND & HART, LLP

/s/ Aaron Tucker

Aaron B. Tucker
555 17th Street, Suite 3200
Denver, CO 80202
(303) 295-8369
abtucker@hollandhart.com

Adam G. Rankin
Paula M. Vance
A. Raylee Starnes
Post Office Box 2208
Santa Fe, New Mexico 87504
(505) 988-4421
(505) 983-6043 Facsimile
agranksin@hollandhart.com
pmvance@hollandhart.com
arstarnes@hollandhart.com

ATTORNEYS FOR OXY USA INC.

CERTIFICATE OF SERVICE

I hereby certify that on July 22, 2026, I served a copy of the foregoing document to the following via Electronic Mail to:

Felicia Orth
felicia.l.orth@gmail.com

Hearing Officer

Sheila Apodaca
New Mexico Energy, Minerals, and
Natural Resources Department
Wendell Chino Building
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
occ.hearings@emnrd.nm.gov

Oil Conservation Commission Clerk

Zachary A. Shandler
Assistant Attorney General
New Mexico Department of Justice
P.O. Box 1508
Santa Fe, New Mexico 87504
zshandler@nmdoj.gov

Oil Conservation Commission Counsel

Jesse Tremaine
Legal Director
New Mexico Energy, Minerals, and
Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
(505) 741-1231
(505) 231-9312
jessek.tremaine@emnrd.nm.gov

Attorney for New Mexico Oil Conservation Division

Ana Maria Gutierrez
Jessica Portmess
Womble Bond Dickinson (US) LLP
1899 Wynkoop St., Ste. 750
Denver, CO 80202
(720) 983-1350
ana.gutierrez@wbd-us.com
jessica.portmess@wbd-us.com

Amanda Thatcher
Womble Bond Dickinson (US) LLP
Phoenix, AZ 85004
(602) 262-5311
amanda.thatcher@wbd-us.com

Attorneys for the New Mexico Oil and Gas Association

Morgan O'Grady
Staff Attorney
Rose Rushing
Staff Attorney
Daniel Timmons
Senior Attorney
Western Environmental Law Center
409 East Palace Avenue, Suite 2
Santa Fe, New Mexico 87501
505-570-5566
ogrady@westernlaw.org
rushing@westernlaw.org
timmons@westernlaw.org

Attorneys for Diné C.A.R.E., Earthworks, San Juan Citizens Alliance, Sierra Club Rio Grande Chapter, Tó Nizhóní Ání, and Western Environmental Law Center

Zachary Pavlik, Staff Attorney
Colin Cox, Senior Attorney
Center for Biological Diversity
Climate Law Institute
zpavlik@biologicaldiversity.org
ccox@biologicaldiversity.org

***Attorneys for the Center for Biological
Diversity***

Samantha Ruscavage-Barz
Senior Attorney, Climate & Health
WildEarth Guardians
301 Guadalupe St., Suite 201
Santa Fe, NM 87501
(505) 401-4180
1025 ½ Lomas NW
Albuquerque, NM 87102
(505) 320-6435
sruscavagebarz@wildearthguardians.org

Attorney for WildEarth Guardians

/s/ Aaron Tucker
Aaron Tucker
Oxy USA Inc.

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JULY 2026



CLASS VI RULEMAKING

Tiffany Wallace – Manager, Policy & External Affairs
Direct Testimony Demonstrative



Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(2) A permit to construct a Class VI injection well issued by the oil conservation division (OCD) shall be valid for a period of two years from the date of issuance. If drilling operations have not commenced within the two-year period, the permit shall automatically terminate without further notice. The owner or operator may request an extension by submitting a written request to the OCD engineering bureau at least 30 days prior to the expiration of the initial two-year period.	(2) A permit to construct a Class VI injection well issued by the oil conservation division (OCD) shall be valid for a period of two five years from the date of issuance. If drilling operations have not commenced within the two five year period, the permit shall automatically terminate without further notice. The owner or operator may request an extension by submitting a written request to the OCD engineering bureau at least 30 days prior to the expiration of the initial two five year period.	Federal rules do not mandate that drilling commence within two-year. Two-year time frame is too brief and poses feasibility challenges. Two-year time frame may not allow for enough time to develop pipelines and other critical infrastructure associated with the project.

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
None	New language added K. Appeals. (1) A person who participated in a permitting action before the department and who is adversely affected by such permitting action or decision may file a petition for hearing before the Oil Conservation Commission.	Oxy encourages the Commission to include appropriate provisions addressing the petition process for reviewing the Division's final permit decisions..

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
None	New language added (8) Non-material, non-substantive permit modifications that do not increase risk to USDWs	Rule creates inadvertent ambiguity as to what constitutes a major or minor modification. The permit review process can take years to complete. Likely that operating conditions and project plans will change that necessitate clarification to improve the enforceability of the permit. Oxy proposes a catch-all category at Subsection J.(8) of 19.15.42.11 NMAC that would provide protection to USDWs while also improving permitting timelines.

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(b) A description of: (i) The fixed frequency, between AoR reevaluations, which must include an initial reevaluation two years after injection begins, and at no time may exceed four years;	(b) A description of: (i) The minimum fixed frequency, not to exceed five years, at which the owner or operator proposes to reevaluate the area of review between AoR reevaluations, which must include an initial reevaluation two years after injection begins, and at no time may exceed four years;	Federal rule provided a fixed frequency of five years. Data collection and simulations needed to reevaluate an AOR are time intensive.

19.15.43.9.E.5

AoR Reevaluations

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(5) An initial AoR reevaluation shall occur no later than two years following the commencement of injection operations. This early reevaluation must be used to confirm the accuracy and reliability of predictive modeling results submitted as part of the original permit application. Upon demonstration to the director, in accordance with Subparagraph (d) of Paragraph (5) of Subsection E of 19.15.43.9 NMAC, that the predictive modeling appropriately represents site conditions, AoR reevaluation frequency may be reduced to a minimum of once every four years. When conducting an AoR reevaluation an owner or operator must:	Strike through language at left and suggest using the following: (5) At the minimum fixed frequency, not to exceed five years, as specified in the area of review and corrective action plan, or when monitoring and operational conditions warrant, owners or operators must:	Federal rule provided a fixed frequency of five years. Data collection and simulations needed to reevaluate an AOR are time intensive.

19-15.43-9.F.(1)(f)

Financial Responsibility

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(v) An owner or operator or its guarantor may use self insurance to demonstrate financial responsibility for geologic sequestration projects. In order to satisfy this requirement the owner or operator must meet a Tangible Net Worth of an amount approved by the director, have a net working capital and tangible net worth each at least six times the sum of the current well plugging, post injection site care and site closure cost, have assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current well plugging, post injection site care and site closure cost, and must submit a report of its bond rating and financial information annually...	(v) An owner or operator or its guarantor may use self insurance to demonstrate financial responsibility for geologic sequestration projects. In order to satisfy this requirement the owner or operator must meet a Tangible Net Worth of an amount approved by the director, have a net working capital and tangible net worth each at least six times the sum of the current well plugging, post injection site care and site closure cost, have assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current well plugging, post injection site care and site closure cost, and must submit a report of its bond rating and financial information annually...	Tangible net worth, rather than net working capital, is a better way to measure a company's ability to meet long-term liabilities. Using tangible net worth eliminates the mismatch in duration and is a better measure of long-term solvency.

19.15.43.9.H

Logging, Sampling, and Testing

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
H. Logging, sampling, and testing prior to injection well operation. (1) During the drilling and construction of a Class VI injection well, the owner or operator must run appropriate logs, surveys and tests to determine or verify the depth, thickness, porosity, permeability, and lithology of, and the salinity of any formation fluids in all relevant geologic formations to ensure conformance with the injection well construction requirements under Subsection G of 19.15.43.9 NMAC and to establish accurate baseline data against which future measurements may be compared. In order to obtain approval for injection, the owner or operator must submit the appropriate forms to the Director along with all required attachments including a descriptive report prepared by a knowledgeable log analyst that includes an interpretation of the results of such logs and tests. At a minimum, such logs and tests must include:	H. Logging, sampling, and testing prior to injection well operation. (1) During the drilling and construction of a Class VI injection well, the owner or operator must run appropriate logs, surveys and tests to determine or verify the depth, thickness, porosity, permeability, and lithology of, and the salinity of any formation fluids in all relevant geologic formations to ensure conformance with the injection well construction requirements under Subsection G of 19.15.43.9 NMAC and to establish accurate baseline data against which future measurements may be compared. In order to obtain approval for injection, the owner or operator must submit the appropriate forms to the Director along with all required attachments including a descriptive report prepared by a knowledgeable log analyst that includes an interpretation of the results of such logs and tests. At a minimum, such logs and tests may must include:	Class VI rules should be performance based, rather than prescriptive Oxy also believes the rules should allow for the infusion of new technologies.

19.15.43.9.H.(2).

Logging, Sampling, and Testing

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Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(a) before and upon installation of the surface casing: (i) Gamma ray, resistivity, or spontaneous potential, and caliper logs before the casing is installed; and	(a) before and upon installation of the surface casing: (i) Gamma ray, resistivity, or spontaneous potential, and caliper logs before the casing is installed; and	Oxy supports the addition of gamma ray testing. Oxy encourages OCD to remove spontaneous potential as a logging method, as it provides redundant information and can increase the risks to well integrity



19-15.43.9.H.(2)

Logging, Sampling, and Testing

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(c) A series of tests designed to demonstrate the internal and external mechanical integrity of injection wells, which may include: (i) a pressure test with liquid or gas; (ii) a tracer survey such as oxygen-activation logging; (iii) a temperature or noise log; (iv) a casing inspection log; and (d) any alternative methods that provide equivalent or better information and that are required by or approved of by the director.	(c) A series of tests designed to demonstrate the internal and external mechanical integrity of injection wells, which may include: (i) a pressure test with liquid or gas; (ii) a tracer survey such as oxygen-activation logging; (iii) a temperature or noise log; (iv) a casing inspection log; or and (d) any alternative methods that provide equivalent or better information and that are required by or approved of by the director.	“Or” is more appropriate language here since (d) is providing full discretion for other methods the Division may think is more appropriate. Some of the listed test methods are outdated and/or provide redundant information. These tests may also increase well integrity risk, while providing no corresponding benefit.

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(4) Quarterly monitoring of the groundwater quality and geochemical changes above the confining zone(s) that may be a result of carbon dioxide movement through the confining zone(s) or additional identified zones including:	(4) Periodic-Quarterly monitoring of the groundwater quality and geochemical changes above the confining zone(s) that may be a result of carbon dioxide movement through the confining zone(s) or additional identified zones including:	Federal regulations require the same monitoring, but on a “periodic basis.” Quarterly monitoring is an excessive burden on owners and operators that does not provide additional protection to water quality and the environment. Gives the Division better discretion over regional requirements that could require more frequent monitoring while also keeping the regulation from being overly burdensome.

Petitioned Language	Oxy Suggested Language	Oxy Reasoning
(3) If the owner or operator obtains evidence that the injected carbon dioxide stream and associated pressure front may cause an endangerment to a USDW, the owner or operator must: (a) immediately cease injection ... (5) The owner or operator shall periodically review the emergency and remedial response plan developed under Paragraph (1) of this Subsection at least once every three years.	(3) If the owner or operator obtains evidence that the injected carbon dioxide stream and associated pressure front may cause an endangerment to a USDW, the owner or operator must: (a) immediately cease injection in the impacted well; ... (5) The owner or operator shall periodically review the emergency and remedial response plan developed under Paragraph (1) of this Subsection at least once every five three years.	Federal regulations require that the plan be reviewed and amended, if appropriate, at least every five years. Clarify that operators of multiple wells need not cease injection in all wells, only the impacted well.

JULY 2026



CLASS VI RULEMAKING

Caroline Wachtman – Development Manager – Carbon Certification
Rebuttal Testimony Demonstrative



Petitioned Language	Center for Biological Diversity Suggestion	Oxy's Concern
None	(3) No new Class VI injection well shall be sited within one half of a mile of a school, library, community center, residential-zoned area, civic building, or other high-occupancy or highly trafficked public space. Further, no new oil, gas, or injection well, including a Class VI injection well, shall be sited within one half of a mile of any such structure if that well would fall within a 10-mile radius of an existing Class VI injection well.	Setbacks were considered and rejected in federal rules. Geology, not land use determines subsurface risk. This would eliminate significant areas from development, particularly in the Permian Basin. Subsurface risk is addressed through the AoR framework.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
(1) Owners or operators of Class VI wells must demonstrate to the satisfaction of the director that the wells will be sited in areas with a suitable geologic system. The owners or operators must demonstrate that the geologic system comprises:	(1) Owners or operators of Class VI wells must demonstrate to the satisfaction of the director that the wells will be sited in areas with a suitable geologic system and shall undertake a site characterization for the area within a 10-mile radius of any new Class VI injection well specifically to investigate transmissive fractures and faults that may communicate with injection and confining zones. The owners or operators must demonstrate that the geologic system comprises:	No federal rule, EPA guidance, or state regulation requires site characterization at this scale. Not based on site-specific information for each project. The 10-mile radius AoR does not have a scientific basis and is not based on site-specific data. A 10-mile radius is 314 square miles.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
None	(5) Using the same methods for identification and correction outlined in this Subsection with regard to corrective action within the area of review, owners or operators of Class VI wells shall also identify and perform any necessary corrective action on all wells within one half of a mile of a school, library, community center, residential-zoned area, civic building, or other high-occupancy or highly trafficked public space located within a 10- mile radius of a proposed Class VI project.	Corrective action should be directed at wells within the zone of potential endangerment to USDWs. The AoR framework already delineates where regulatory action is needed.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(3) Owners or operators of Class VI wells must perform the actions to delineate the area of review and identify all wells that require corrective action: (a) Predict, using existing site characterization, monitoring and operational data, the projected lateral and vertical migration of the carbon dioxide plume and formation fluids in the subsurface from the commencement of injection activities until the plume movement ceases, until pressure differentials sufficient to cause the movement of injected fluids or formation fluids into a USDW are no longer present, or until the end of a fixed time period as determined by the model must: (i) Be based on detailed geologic data collected to characterize the injection zone(s), confining zone(s) and any additional zones; and anticipated operating data, including injection pressures, rates, and total volumes over the proposed life of the geologic sequestration project;	(3) Using a qualified professional expert, owners Operators of Class VI wells must perform the following actions to delineate the area of review and identify all wells that require corrective action: (a) Predict, using existing site characterization, monitoring and operational data, and computational, peer-reviewed or commercially-available modeling, the projected lateral and vertical migration of the carbon dioxide plume and formation fluids in the subsurface from the commencement of injection activities until the plume movement ceases, until pressure differentials sufficient to cause the movement of injected fluids or formation fluids into a USDW are no longer present, or until the end of a fixed time period as determined by the Director, calculate the area over which induced pressure differentials could drive movement of formation fluids or injected fluids into a USDW over the maximum duration of injection, and define the AoR as the union of these two areas. The model must: (i) Use an ensemble approach that considers the full range of realistic variation in and interaction among key parameters, including permeability-field parameters, kv/kh ratio, porosity, and relative permeability curves and hysteresis;	EPA's framework for defining the AoR already contemplates CO2 plume and pressure, and is focused on protection of USDWs. Defining the AoR using the maximum pressure front may result in area that is too large and unworkable for any commercial projects. Oxy's EPA Region 6 permit demonstrates the existing AoR delineations appropriately account for pressure effects under the existing framework.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
None	19.15.43.9.B(9) “Intensive Corrective Action Area” means the area into which brine with supercritical carbon dioxide will potentially intrude, defined radially from the injection well location as the maximum plume boundary extent across all model simulations, with an additional buffer of half the distance of the maximum plume boundary extent. 19.15.43.9.E(3)(a)(vi) Identify the Intensive Corrective Action	No federal rule, EPA guidance, or state regulation establishes an Intensive Corrective Action Area. A 50% buffer is arbitrary. Periodic AoR reevaluation is the appropriate mechanism for managing prediction uncertainty.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(3)(iii) Consider potential migration through faults, fractures, and artificial penetrations.	(3)(vii) Consider potential migration through faults, fractures, and artificial penetrations, using 3D seismic characterization; and	EPA recommends but does not require this type of characterization. Mandatory 3D seismic characterization of the full AoR could cover hundreds of square miles, would be prohibitively expensive, and may not result in materially different protection of USDWs.

Independent Third-Party Verification

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
None	(2)(c) Findings of independent, certified third-party verification of the modeling ensemble used to delineate the area of review.	Duplicative of OCD's review. Adds regulatory bottleneck to an already rigorous and complex regulatory process. No federal rule, EPA guidance, or state regulation requires independent third-party verification.

AoR Reevaluation

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(5) An initial AoR reevaluation shall occur no later than two years following the commencement of injection operations. This early reevaluation must be used to confirm the accuracy and reliability of predictive modeling results submitted as part of the original permit application. Upon demonstration to the director, in accordance with Subparagraph (d) of Paragraph (5) of Subsection E of 19.15.43.9 NMAC, that the predictive modeling appropriately represents site conditions, AoR reevaluation frequency may be reduced to a minimum of once every four years. When conducting an AoR reevaluation an owner or operator must:	(5) An initial AoR reevaluation shall occur no later than two years following the commencement of injection operations, or if the owners or operators fail to confirm the model's validity as specified in Subparagraph (b) of Paragraph (3) of Subsection E of 19.15.43.9 NMAC, the difference between the measured and modeled increases in pressure exceeds either 20 percent of the modeled increase in pressure or 50 kilopascals, the plume is detected in a monitoring well the plume was not expected to reach or more than one month earlier than expected, a seismic event greater than or equal to moment magnitude 2.0 occurs within the modeled pressure footprint, a pressure fall-off test results yielding formation properties materially inconsistent with model-assumed values, injection commences by another operator in the same formation or a hydraulically connected zone within the pressure footprint, or the owner, operator, or regulator discovers a previously unidentified well, fault, or fracture within the AoR. This early reevaluation must be used to confirm the accuracy and reliability of predictive modeling results submitted as part of the original permit application. Upon demonstration to the director, in accordance with Subparagraph (d) of Paragraph (5) of Subsection E of 19.15.43.9 NMAC, that the predictive modeling appropriately represents site conditions, AoR reevaluation frequency may be reduced to a minimum of once every four years. When conducting an AoR reevaluation an owner or operator must:	AoR reevaluation frequency should match the federal five-year standard. Section 19.15.43.9.E(2)(b)(ii) already requires operators to provide monitoring and operational conditions that would warrant a reevaluation before the next scheduled reevaluation. Site-specific approach—reviewed and approved by the Director before injection begins—is more protective than a one-size-fits-all approach because it is calibrated to the actual geology, injection rates, and monitoring program of each project. Automatic triggers are arbitrary and fail to account for site-specific variability.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
(3)(b) Using methods approved by the director, identify all penetrations, including active and abandoned wells and underground mines, in the area of review that may penetrate the confining zone(s). Provide a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the director may require.	(3)(b) Using methods approved by the director, identify all penetrations, including active and abandoned wells and underground mines, in the area of review that may penetrate the confining zone(s), employing both a non-physical review and, where required, a subsequent physical investigation, as detailed in Subsection (d) of Paragraph (1) of Subsection C of 19.15.43.9 NMAC. Provide a description of each well's type, construction, date drilled, location, division-designated well status, depth, record of plugging and/or completion, and any additional information the director may require.	Oxy supports robust well identification using appropriate site-specific tools but opposes a blanket geophysical-investigation mandate across the entire AoR. Geophysical surveys will not work in all cases. For example, magnetic surveys cannot detect the wellbore where casing has been pulled from an abandoned well. Petitioned Language provides the flexibility to deploy the right tools for each site.



Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(1)(a) The financial responsibility instrument(s) used must be from the following list of qualifying instruments: (i) Trust funds. (ii) Surety bonds that satisfy all applicable requirements set forth in Sections 19.15.8.9-10 NMAC. (iii) Letter of credit that satisfies all applicable requirements set forth in Section 19.15.8.9 and Subsections A-E of 19.15.8.11 NMAC. (iv) Insurance. (v) Self insurance (i.e., Financial Test and Corporate Guarantee). (vi) Escrow account adhering to the requirements under Section 19.15.8.10 NMAC. (vii) Any other instrument(s) satisfactory to the director.	(1)(a) The financial responsibility instrument(s) used must be from the following list of qualifying instruments: (i) Trust funds. (ii) Surety bonds that satisfy all applicable requirements set forth in Sections 19.15.8.9-10 NMAC. (iii) Letter of credit that satisfies all applicable requirements set forth in Section 19.15.8.9 and Subsections A-E of 19.15.8.11 NMAC. (iv) Insurance. (v) Self insurance (i.e., Financial Test and Corporate Guarantee). (vi) Escrow account adhering to the requirements under Section 19.15.8.10 NMAC. (vii) Any other instrument(s) satisfactory to the director.	Eliminating self-insurance would put New Mexico out of sync with the federal regulations and most primacy states. Could deter Class VI investment, contrary to the Carbon Stewardship Act. Precludes the Director from utilizing future financial assurance products.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(1)(f)(i) In the event that the owner or operator combines more than one instrument for a specific geologic sequestration phase (e.g., well plugging), such combination must be limited to instruments that are not based on financial strength or performance (i.e., self insurance or performance bond), for example trust funds, surety bonds guaranteeing payment into a trust fund, escrow account, and insurance. In this case, it is the combination of mechanisms, rather than the single mechanism, which must provide financial responsibility for an amount at least equal to the current cost estimate.	(1)(f)(i) In the event that the owner or operator combines more than one instrument for a specific geologic sequestration phase (e.g., well plugging), such combination must be limited to instruments that are not based on financial strength or performance (i.e., self insurance or performance bond), for example trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, escrow account, and insurance. In this case, it is the combination of mechanisms, rather than the single mechanism, which must provide financial responsibility for an amount at least equal to the current cost estimate.	This would put New Mexico out of sync with the federal regulations. This would put New Mexico out of sync with most primacy states. Eliminating self-insurance could deter Class VI investment, contrary to the Carbon Stewardship Act. Oxy recommends the Commission adopt the financial test set forth in EPA's RCRA regulations.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
(2) Deviation checks during drilling on all holes constructed by drilling a pilot hole which is enlarged by reaming or another method. Such checks must be at sufficiently frequent intervals to determine the deviation from the original pilot hole to ensure that vertical avenues for fluid movement in the form of diverging holes are not created during drilling; and (a) before and upon installation of the surface casing: (i) Gamma ray, resistivity, spontaneous potential, and caliper logs before the casing is installed; and (ii) a cement bond and variable density log to evaluate cement quality radially, and a temperature log after the casing is set and cemented. (b) Before and upon installation of the long string casing: (i) Gamma ray, resistivity, spontaneous potential, porosity, caliper, fracture finder logs, and any other logs the director requires for the given geology before the casing is installed;	(2) Deviation checks during drilling on all holes constructed by drilling a pilot hole which is enlarged by reaming or another method. Such checks must be at sufficiently frequent intervals to determine the deviation from the original pilot hole to ensure that vertical avenues for fluid movement in the form of diverging holes are not created during drilling; and (a) before and upon installation of the surface casing: (i) Gamma ray, resistivity, spontaneous potential, sonic, and caliper, porosity, and density logs before the casing is installed; and (ii) a cement bond and variable density log to evaluate cement quality radially, and a temperature log after the casing is set and cemented. (b) Before and upon installation of the long string casing: (i) Gamma ray, resistivity, spontaneous potential, sonic, density, porosity, caliper, fracture finder logs using best available technology, and any other logs the director requires for the given geology before the casing is installed;	Rules should be performance-based—specifying the data to be obtained, not the tools—to allow for evolving technology and site-specific programs, subject to Director approval.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
(6) Upon completion, but prior to operation, the owner or operator must conduct the following tests to verify hydrogeologic characteristics of the injection zone(s): (a) a pressure fall-off test; and (b) a pump test; or (c) injectivity tests.	(6) Upon completion, but prior to operation, the owner or operator must conduct the following tests to verify hydrogeologic characteristics of the injection zone(s): (a) a pressure fall-off test; and (b)(i) a pump test; or (c)(ii) injectivity tests. (b) No operator shall use interference tests or any other injectivity test that requires more than one borehole to penetrate the injection zone.	It is unclear whether this targets the test methodology or the second borehole. Potential risks posed by monitoring or support wells penetrating injection zone is already addressed by including the construction and mechanical integrity information of those wells in the Class VI application.

Petitioned Language	Center for Biological Diversity Suggestion	Oxy Concern
(1) Except during stimulation, the owner or operator must ensure that injection pressure does not exceed 90 percent of the fracture pressure of the injection zone(s) so as to ensure that the injection does not initiate new fractures or propagate existing fractures in the injection zone(s). In no case may injection pressure initiate fractures in the confining zone(s) or cause the movement of injection or formation fluids that endangers a USDW. Pursuant to requirements at Subparagraph (i) of Paragraph (1) of Subsection C of 19.15.43.9 NMAC, all stimulation programs must be approved by the director as part of the permit application and incorporated into the permit.	(1) Except during stimulation, the owner or operator must ensure that injection pressure does not exceed 90 80 percent of the fracture pressure of the injection zone(s) so as to ensure that the injection does not initiate new fractures or propagate existing fractures in the injection zone(s). During the initiation of injection, pumping pressure ramp-up shall occur incrementally over the course of a minimum of five days with a spinner log run at each incremental increase. In no case may injection pressure initiate fractures in the confining zone(s) or cause the movement of injection or formation fluids that endangers a USDW. Pursuant to requirements at Subparagraph (i) of Paragraph (1) of Subsection C of 19.15.43.9 NMAC, all stimulation programs must be approved by the director as part of the permit application and incorporated into the permit.	90% limit is the federal standard at 40 C.F.R. § 146.88(a). No quantitative justification for 80%. Will require more Class VI injection wells or longer timelines to achieve the planned injection volumes without a demonstrated safety benefit.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(4)(b) the monitoring frequency and spatial distribution of monitoring wells based on baseline geochemical data that has been collected under Subparagraph (f) of Paragraph (1) of Subsection C of 19.15.43.9 NMAC and on any modeling results in the area of review evaluation required by Paragraph (3) of Subsection E of 19.15.43.9 NMAC. The monitoring plan must describe how the proposed monitoring will yield useful information on the area of review delineation and/or compliance with standards under Section 40 CFR 144.12.	(4)(b) the monitoring frequency and spatial distribution of no fewer than four monitoring wells based on baseline geochemical data that has been collected under Subparagraph (f) of Paragraph Paragraph (1) of Subsection C of 19.15.43.9 NMAC, and on any modeling results in the area of review evaluation required by Paragraph (3) of Subsection E of 19.15.43.9 NMAC, a maximum-risk scenario simulation, and two simulations in which computational model grid spacing is increased and decreased by a factor of two. The monitoring plan must describe how the proposed monitoring will yield useful information on the area of review delineation and/or compliance with standards under Section 40 CFR 144.12.	The appropriate number and placement of monitoring wells is site specific. A blanket minimum substitutes an arbitrary number for the Director’s judgment. The Director should retain site-specific discretion.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(9) the director may require surface air monitoring to detect movement of carbon dioxide that could endanger a USDW, including in oil and gas fields or other areas with a high density of legacy wellbores.	(9) the director may require surface air monitoring is required to detect movement of carbon dioxide that could endanger a USDW, including in oil and gas fields or other areas with a high density of legacy wellbores.	Surface air monitoring is only potentially effective over a very small area near the wellbore, and distinguishing an event from baseline is error-prone. The Director is already authorizing to require surface air monitoring in certain cases.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(10) seismicity monitoring is required as part of the operational and post-injection monitoring requirements for all Class VI injection projects. The owner or operator must design and implement a site-specific seismic monitoring program capable of detecting and characterizing induced seismicity that may result from carbon dioxide injection activities. Responses to seismic events shall be conducted in accordance with protocols established by the oil conservation division. (a) Design of Class VI seismicity monitoring program must be based on the potential risk of disturbing the confinement efficiency and endangering USDWs within the area of review. (b) The owner or operator shall purchase a state-owned, distributed acoustic network of seismic sensors, the resulting data of which shall be owned by the state. (c) The spatial distribution of the monitoring network must be decided using baseline data and must incorporate the Seismic Hazard Assessment and other findings pursuant to Item (v) of Subparagraph (c) of Paragraph (1) of Subsection C of 19.15.43.9 NMAC to establish baseline microseismic activity. (d) The seismic threshold metric must use baseline microseismic activity.	(10) seismicity monitoring is required as part of the operational and post-injection monitoring requirements for all Class VI injection projects. The owner or operator must design and implement a site-specific seismic monitoring program capable of detecting and characterizing induced seismicity that may result from carbon dioxide injection activities. Responses to seismic events shall be conducted in accordance with protocols established by the oil conservation division. (a) Design of Class VI seismicity monitoring program must be based on the potential risk of disturbing the confinement efficiency and endangering USDWs within the area of review. (b) The owner or operator shall purchase a state-owned, distributed acoustic network of seismic sensors, the resulting data of which shall be owned by the state. (c) The spatial distribution of the monitoring network must be decided using baseline data and must incorporate the Seismic Hazard Assessment and other findings pursuant to Item (v) of Subparagraph (c) of Paragraph (1) of Subsection C of 19.15.43.9 NMAC to establish baseline microseismic activity. (d) The seismic threshold metric must use Peak Ground Velocity or Peak Ground Acceleration.	Peak Ground Velocity and Peak Ground Acceleration are valid metrics but not the only defensible approaches. The rule should preserve the ability to use the best metric for each site.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
Testing and monitoring associated with geologic sequestration projects must, at a minimum, include: ... (6) a pressure fall-off test at least once every five years unless more frequent testing is required by the Director based on site-specific information.	Testing and monitoring associated with geologic sequestration projects must, at a minimum, include: ... (6) a pressure fall-off test based on site-specific data and run to completion at least once every five years unless more frequent testing is required by the Director based on site-specific information.	The proposed rules already require the relevant performance objective. Mandating a specific tool can preclude use of the best available tool to obtain the relevant information.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(12) The owner or operator shall periodically review the testing and monitoring plan to incorporate monitoring data collected under this Part, operational data collected under Subsection I of 19.15.43.9 NMAC, and the most recent area of review reevaluation performed under Paragraph (5) of Subsection E of 19.15.43.9 NMAC. An initial review of the testing and monitoring plan shall occur two years after injection begins, and at no time may exceed four years. Based on this review, the owner or operator shall submit an amended testing and monitoring plan or demonstrate to the director that no amendment to the testing and monitoring plan is needed. Any amendments to the testing and monitoring plan must be approved by the director, and are subject to the permit modification requirements at Subsection H of 19.15.42.11 NMAC or Subsection J of 19.15.42.11 NMAC, as appropriate. Amended plans or demonstrations shall be submitted to the director as follows:	(12) The owner or operator shall periodically review the testing and monitoring plan to incorporate monitoring data collected under this Part, operational data collected under Subsection I of 19.15.43.9 NMAC, and the most recent area of review reevaluation performed under Paragraph (5) of Subsection E of 19.15.43.9 NMAC, and new EPA standards regarding material compatibility for well infrastructure. An initial review of the testing and monitoring plan shall occur two years after injection begins, and at no time may exceed four years. Based on this review, the owner or operator shall submit an amended testing and monitoring plan or demonstrate to the director that no amendment to the testing and monitoring plan is needed. Any amendments to the testing and monitoring plan must be approved by the director, must be incorporated into the permit, and are subject to the permit modification requirements at Subsection H of 19.15.42.11 NMAC or Subsection J of 19.15.42.11 NMAC, as appropriate. Amended plans or demonstrations shall be submitted to the director as follows:	The purpose of demonstrating material compatibility is to demonstrate mechanical integrity; and the framework for demonstrating mechanical integrity are already addressed in the rules. A requirement for material compatibility should be adaptable to the subsurface conditions experienced by the well – wells completed in the injection zone will experience different fluids than wells above the confining zone. The rule should be consistent with existing requirements.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
The owner or operator must, at a minimum, provide, as specified in Paragraph (5) of this Subsection, the following reports to the director and the EPA, for each permitted Class VI well: ... (2) Report, within 30 days, the results of: (a) periodic tests of integrity; (b) any well workover; and, (c) any other test of the injection well conducted by the permittee if required by the director.	The owner or operator must, at a minimum, provide, as specified in Paragraph (5) of this Subsection, the following reports to the director and the EPA, for each permitted Class VI well: ... (2) Report, within 30 days, the results of: (a) periodic tests of mechanical integrity; (b) gauge malfunction or instrumentation failure; (b)(c) any well workover; and, (c)(d) any other test of the injection well conducted by the permittee if required by the director.	This is overbroad. Routine instrumentation issues—sensor drift, telemetry interruptions, calibration events—do not indicate mechanical integrity loss or USDW endangerment.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
None	(3) The owner or operator must have at least one employee on the premises or otherwise available at all times with the authority to carry out the emergency and remedial response plan.	Onerous and unworkable for remote locations. Does not account for automated shut-off controls and continuous recording devices that are monitored remotely. The proposed rules already require automatic shut-off with alarms and 24-hour Director notification and implementation of the approved emergency plan.

Petitioned Language	Conservation Groups Suggestion	Oxy Concern
(3) If the owner or operator obtains evidence that the injected carbon dioxide stream and associated pressure front may cause an endangerment to a USDW, the owner or operator must: (a) immediately cease injection; (b) take all steps reasonably necessary to identify and characterize any release; ...	(3)(4) If the owner or operator obtains evidence that the injected carbon dioxide stream and associated pressure front may cause an endangerment to a USDW, a significant seismic event has occurred, a statistically significant geochemical change is detected above the confining zone, a release of carbon dioxide is detected by surface air monitoring, fluid has migrated into an unauthorized zone, or a gauge has malfunctioned for longer than one week, the owner or operator must: (a) immediately cease injection; (b) take all steps reasonably necessary to identify and characterize any release, migration, or malfunction;...	This would generate immaterial notifications for every gauge anomaly that could obscure significant events. The rule should align with 40 C.F.R. § 146.91(c).