

WHAT EVERY WYOMING LANDOWNER SHOULD KNOW ABOUT CARBON CAPTURE & STORAGE

A CCS RESOURCE GUIDE AND FREQUENTLY ASKED QUESTIONS







1000 E. University Avenue, Dept. 3012 Laramie, Wyoming 82071



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AUTHORS

Scarlett Forrest, Assistant Research Scientist, University of Wyoming School of Energy Resources Jurisprudence of Underground Law & Energy

Madeleine Lewis, Associate Research Scientist, University of Wyoming School of Energy Resources Jurisprudence of Underground Law & Energy

Carson Tanner as part of an independent study supervised by Professor Tara Righetti. Carson graduated with a J.D./M.A. in Environment and Natural Resources at the University of Wyoming in 2023.

Tara Righetti, Occidental Chair of Energy and Environmental Policies and SER Professor of Law at the University of Wyoming.

CONTRIBUTORS

Cole James, 3D Asset Developer at the University of Wyoming School of Energy Resources.

Sabrina Kaufman, Marketing Outreach Coordinator, University of Wyoming School of Energy Resources.

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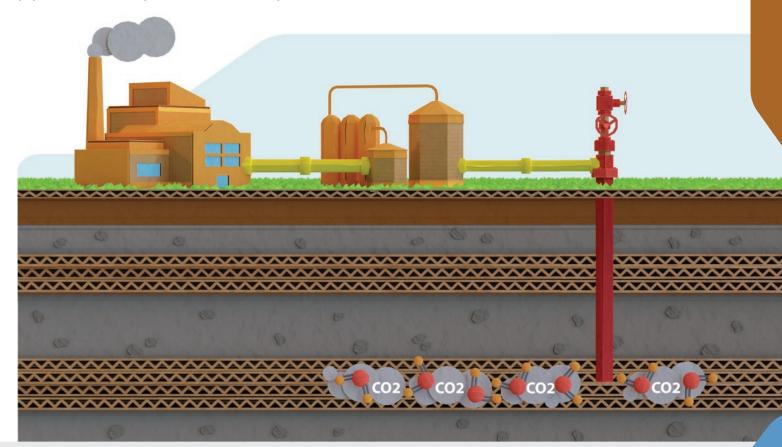
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WHAT IS CARBON CAPTURE AND STORAGE?

Carbon capture and storage ("CCS") is the process of capturing carbon dioxide ("CO2") molecules and storing them in underground geologic formations. CCS may also involve transporting CO2 via pipelines from capture sources to injection wells.



¹ United States Department of Energy, DOE Explains...Carbon Sequestration, https://www.energy.gov/science/doe-explainscarbon-sequestration (last visited Sept. 30, 2024).

WHAT ARE THE POTENTIAL RISKS OF CCS?

It is well established that subsurface formations are capable of safely and securing CO2. In many places, CO2 exists naturally in the subsurface. Additionally, CO2 injection operations have been conducted for decades as part of operations for enhanced oil recovery.

Concerns about CCS include the possibility of leakage into the atmosphere and into other subsurface formations, including those containing oil and gas or groundwater. While CO2 is a non-flammable gas and does not pose a risk of explosion, in rare cases, a high concentration leak from a pipeline or well could pose health and safety concerns. All stages of CCS are highly regulated to limit these potential risks to public health and the environment.

CO2 injections could also induce seismic activity and associated land subsidence issues that may impact aboveground structures and subsurface resources.²

Additionally, depending on the capture technology used, CCS can generate various waste by-products that could increase the possibility of leakage or have other health, safety, and environmental impacts. However, these risks can be mitigated by proper waste handling and disposal by the CCS operator.³

HOW IS CCS REGULATED?

CCS is regulated by Class VI of the Underground Injection Control Program of the Safe Drinking Water Act.⁴ The program is administered either by the Environmental Protection Agency (the "EPA") or by state agencies who have obtained primacy over the Class VI program.⁵ To achieve primacy, a state must have implemented a Class VI regulation program which meets EPA's minimum requirements. Wyoming has achieved primacy.⁶

In Wyoming, the water quality division of the Department of Environmental Quality ("DEQ") is the state agency responsible for regulating injection operations as part of CCS.⁷ The Class VI permitting process requires the injector to demonstrate the ability of the subsurface formations to safely contain the CO2, establishes stringent well construction standards, and imposes monitoring obligations to limit potential risks associated with CCS.⁸

² Seyed Kourosh Mahjour & Salah A. Faroughi, Risks and Uncertainties in Carbon Capture, Transport, and Storage Projects: A Comprehensive Review, GAS SCI. & ENGINEERING, November 2023, at 1, 6.

³ Id. at 3.

⁴ See 42 U.S.C. § 300h-9(b).

⁵ See 42 U.S.C. § 300g-3(a)(2).

⁶ See Environmental Protection Agency, *Primary Enforcement Authority for the Underground Injection Control Program*, https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program-0 (last visited Sept. 24, 2024); see also 42 U.S.C. § 300h-1, providing for states to be the primary regulatory authorities for the Safe Drinking Water Act.

⁷ See Wyo. Stat. §§ 35-11-313(a), (e)-(f), providing that CCS is prohibited unless authorized by a permit issued by DEQ and providing DEQ with the authority to promulgate rules to regulate CCS operations in Wyoming.

⁸ See 020-0011-24 Wyo. Code R. § 12(a); 020-0011-24 Wyo. Code R. § 14; 020-0011-24 Wyo. Code R. § 20.

WHO IS RESPONSIBLE IF SOMETHING GOES WRONG?

Wyoming law clarifies that an injector maintains the title and responsibility for any CO2 it injects and stores underground. . The law explicitly provides that landowners—as pore space owners—will not be liable for CCS operations "solely by virtue of their interest or by their having given consent to the injection." 9

If certain criteria are met after a period of at least 20 years since injections have ceased, liability can be transferred to the State once an certificate of project completion is received." When an injector receives a certificate of project completion, the injector is "forever released from all regulatory requirements associated with the continued storage and maintenance of the injected carbon dioxide," and "[p]rimary responsibility and liability" for the carbon dioxide transfers to the State. To cover these obligations, injectors into Class VI wells pay 7 cents per ton of injected carbon dioxide into a "geologic sequestration special revenue account" which can be used to satisfy claims associated with the release of carbon dioxide from a project after the operator has received a certificate of project completion. Unless an operator has received a certificate, the State bears no responsibility for the CO2.

A landowner may also have civil claims against the injector arising under tort or contract. DEQ requires CCS injectors to maintain a public liability insurance policy until DEQ certifies that the CO2 plume has stabilized. The policy must cover accidents included in the "Risk Activity Table" provided by DEQ, which includes mineral rights infringements, water quality contamination, and CO2 releases, among other risks. However, the insurance coverage required by DEQ may not cover all claims. As a result, CCS agreements may include additional risk management provisions to protect landowners, including indemnity provisions, insurance, and bonding. A licensed Wyoming attorney can help protect against these risks in agreements authorizing use of pore space.

DEQ WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

⁹ Wyo. Stat. § 34-1-153(b).

¹⁰ Wyo. Stat. §§ 35-11-319(b), (c).

¹¹ See 020-0011-29 Wyo. Code R. § 4(a); Wyo. Stat. §§ 35-11-320(c), (d).

¹² 24 Wyo. Code R. § 26(I)(iii).

¹³ 24 Wyo. Code R. § 26(I)(i)(A); see *generally*, 24 Wyo. Code R. App. A.

HOW WILL I KNOW IF A CCS PROJECT IS CONTEMPLATED UNDER OR NEAR MY PROPERTY?

Wyoming law requires Class VI applicants to provide landowners with notice of proposed projects anytime the landowner's interests are included in the project, or if the landowner's property is located within 1 mile of the geologic sequestration site. ¹⁴ Class VI applicants must also publish notice of the application in a newspaper of general circulation in each county of the proposed operation at weekly intervals for 4 consecutive weeks. ¹⁵ In addition, land professionals may approach Wyoming landowners to ask about acquiring injection rights.

WHAT IS PORE SPACE AND WHO OWNS IT?

In geologic CCS, CO2 is injected into the "pore space" of a subsurface geologic formation. Wyoming defines pore space as "subsurface space which can be used as storage for carbon dioxide or other substances." When thinking about pore space, envision a kitchen sponge. Pore space is similar to the small holes within a sponge which hold water. The existing pore space is not empty; those pores will already be occupied by oil, gas, brine, or water.

In Wyoming, the surface owner also owns the underground pore space.¹⁷ However, pore space can be "severed" into its own estate, meaning the owner of the surface and the owner of the subsurface pore space can be two different parties.²⁰ A review of historical transactions concerning the property and minerals is necessary to determine if pore space has been conveyed.



¹⁴ Wyo. Stat. § 35-11-313(f)(2)(N)(II).

¹⁵ Wyo. Stat. § 35-11-313(f)(2)(N)(I).

¹⁶ Wyo. Stat. § 34-1-152(d).

¹⁷ See Wyo. Stat. § 34-1-152(a).

¹⁸ See Wyo. Stat. § 34-1-152(b).



HOW DO I CONTRACT FOR MY PORE SPACE?

Under Wyoming law, pore space can be "conveyed in the manner provided by law for the transfer of mineral interests in real property." Common methods to convey pore space interests include easements, leases, and sales. Some of these agreements limit the rights only to subsurface use of the pore space while others also grant the right to put facilities on the land.

WHAT HAPPENS IF I DON'T ENTER INTO AN AGREEMENT?

Some sequestration projects can require tens of thousands of acres of pore space. Due to the immense contracting and land acquisition challenge that presents, the Wyoming Oil and Gas Conservation Commission is permitted to create geologic sequestration units and to compulsorily include pore space in some circumstances.²⁰ To form a unit, a petitioner must submit a unitization plan to the Commission which includes allocation of economic benefits within the unitized area and how the area is to be operated.²¹

The Wyoming legislature defines the term "economic benefits" in statute as "the equitable proportionate share of all financial proceeds" owed to each pore space owner in a unit based on "each individual pore space owner's contribution of pore space storage capacity to a unit area."²² Petitioners are required to provide notice to all persons having an interest in the surface or pore space estate in the unit area, encumbrance holders, and all surface estate or pore space owners located within one-half (1/2) mile from the boundaries of the proposed unit area, via certified mail at least 30 days prior to the hearing.²³

After the hearing, the Commission must decide whether to approve the proposed unitization plan.²⁴ If the Commission approves, parties owning at least 75 or 80% of the pore space storage capacity included in the unitization plan must ratify the plan for it to become effective.²⁵ Additionally, an owner of pore space within a geologic sequestration site who is not included in the unitization plan may petition to be included in the unit.



¹⁹ Id.

²⁰ Wyo. Stat. § 35-11-315(a).

²¹ Wyo. Stat. §§ 35-11-315(a)(vi)-(ix).

²² Wyo. Stat. § 35-11-314(b)(ii).

²³ Wyo Stat. § 35-11-315(a)(iii); Wyo. Stat. § 35-11-316(a).

²⁴ Wyo. Stat. § 35-11-316(b).

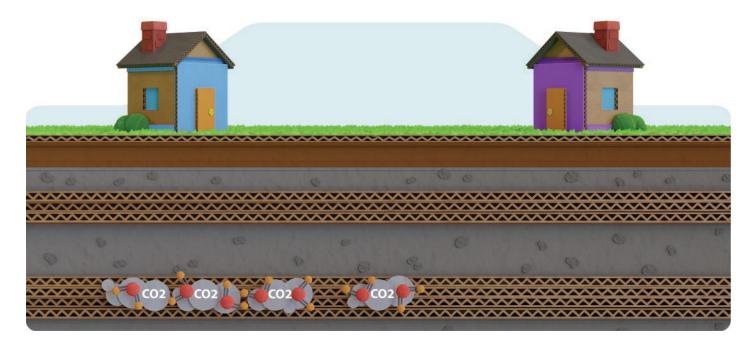
²⁵ Wyo. Stat. § 35-11-316(c); 055-0001.3-43 Wyo. Code R § 43(h).



WHAT DO I DO IF CO2 MIGRATES TO MY PROPERTY?

After CO2 is injected underground it creates a plume which will expand and eventually stabilize. ²⁶ This creates the possibility for CO2 to migrate into a landowner's pore space even if that landowner has not contracted for CCS development or been included in a CCS unitization plan. Such landowners may petition the Commission to be included within a geologic sequestration unit, where they will be afforded a hearing to present the basis for being included in a unitization plan. ²⁷ If the landowner's petition is granted, the landowner will be "considered to have been a member of the unit since its inception and ... shall be entitled to a proportionate share of all economic benefits received by unit members since the inception of the unit." ²⁸

Landowners affected by migrating carbon dioxide should consider consulting with an attorney to navigate the petition process. Petitioning landowners are statutorily required to provide notice of their petition to all persons specified in the unitization application, and must provide a "deposit of money sufficient to pay all costs of the inclusion of proceedings."²⁹ An attorney would be able to help a landowner identify the necessary parties and to provide legally sufficient notice according to Wyoming's statutory requirements. If the petition is unsuccessful, the landowner must rely on an attorney to bring a civil trespass claim. Indirect subsurface trespass is an unsettled area of law in Wyoming.³⁰



²⁶ See Shelagh J. Baines and Richard H. Worden, *Geologic Storage of Carbon Dioxide*, THE GEOLOGIC SOCIETY OF LONDON at 3 (2004).

²⁷ See Wyo. Stat. § 35-11-316(g).

²⁸ Id.

²⁹ Id.

³⁰ See generally, ANR Production Co. v. Kerr-McGee Corp., 893 P.2d 698 (Wyo. 1995).

WHAT IS MY PORE SPACE WORTH?

This is perhaps the most common question any landowner presented with a CCS opportunity will have. Unfortunately, this may also be the most complex question to answer. Not all pore space is equal. The characteristics of the geologic subsurface can vary even between neighboring landowners. Characteristics like porosity and depth are important economic factors in the valuation of pore space. Additionally, a landowner's proximity to sources of CO2 or CCS infrastructure such as carbon dioxide pipelines can influence the value of that landowner's pore space. The terms of the granting instrument, including how the pore space is conveyed (i.e. though a sale, lease, easement, or license), will also affect the value of the interest in pore space granted. Landowners should consider consulting with an attorney to help negotiate the best possible value for their pore space.

As of September 2024, the Wyoming Office of State Lands and Investments has entered into two agreements authorizing use of state owned pore space for carbon sequestration. Both agreements included an injection fee of \$1/ton, but the bonus payments differed substantially, illustrating how values may differ even within the same basin. These agreements are publicly available and provide one example of the value that these arrangements can provide to landowners.



Class VI well applicants must provide an analysis of how the proposed CO₂ injection will be compatible with minerals.

WHAT ARE THE MOST COMMON TERMS OF PORE SPACE ACQUISITION AGREEMENTS

In 2024, researchers at the University of Wyoming School of Energy Resources conducted a study analyzing pore space acquisition contracts. That study found that contracts are typically divided into three distinct periods: (1) a development period during which geologic characterization, permitting, and well construction activities are conducted; (2) an injection period; and (3) a period of post-injection stewardship during which monitoring activities are conducted until the operator receives site certification. Compensation structures are also aligned with these periods, generally including a bonus payment and annual rentals during the development period and a volumetric payment during the injection period. Since markets for carbon removal are still developing, many agreements index volumetric payments to metrics like 45Q or provide opportunities for the landowner to participate in the value of any carbon offsets or other credits generated.

I ALSO OWN MINERALS. HOW CAN CCS OPERATIONS IMPACT MY MINERAL RIGHTS OR PRODUCTION?

Under Wyoming law, development of the mineral estate has priority over other subsurface uses and is thus the dominant estate.³¹ The Wyoming Oil and Gas Conservation Commission's construction standards for Class VI wells do not reference the mineral estate directly, but states that a CCS operator must construct Class VI wells to prevent the "movement of fluids into or between [underground sources of drinking water] or into any unauthorized zones."³² Class VI well applicants must provide an analysis of how the proposed CO2 injection will be compatible with minerals. In addition, DEQ requires CCS operators to include cost estimates for mineral rights infringements in their financial assurance calculations.³³

The Wyoming Oil and Gas Conservation Commission is prohibited from issuing unitization orders that "diminish, impair or otherwise alter the dominance of the mineral estate over the surface estate and pore space interests" or "prohibit a mineral interest owner from developing the owner's minerals above or below the unit area.³⁴

Existing oil and gas wells and plugged and abandoned wells may provide a conduit for CO2 to migrate out of the injection formation. DEQ may require a CCS operator to perform corrective action on existing wells, which could include recompletions or abandonment. Access to these wells must be negotiated with the well operator.

Additionally, CCS operators who discover CO2 leaks "must provide written notice to all surface owners, mineral claimants, mineral owners, lessees, and other owners of record of subsurface interests within thirty (30) days."³⁵

Finally, Wyoming mineral owners should also consider the possibility that minerals are discovered below a geologic formation where CCS operations are being conducted. Exploring for those minerals could be more costly and difficult due to the presence of CCS operations. To protect the containment system, many CCS agreements will place restrictions on the landowner's right to drill through the storage formation. DEQ's rules specify that CCS operators wishing to inject below the lowermost underground source of drinking water must submit documentation to EPA of planned or permitted "mineral resource exploitation potential of the proposed injection formation(s)."³⁶ This is to determine "if there are any plans to drill through the formation to access resources in or beneath the proposed injection zone(s) or formation(s)."³⁷

³¹ See Wyo. Stat. § 34-1-152 (e).

³² 020-0011-24 Wyo. Code R. § 14(a)(i).

³³ 020-0011-8 Wyo. Code R. § 26(b)(ii)(B).

³⁴ Wyo. Stat. § 35-11-316(k)(ii)-(iii).

³⁵ 020-0011-24 Wyo. Code R. § 25(c)(iii).

³⁶ 020-0011-24 Wyo. Code R. § 15(b)(i)(G.)

³⁷ Id



CAN CARBON SEQUESTRATION DAMAGE MY GROUNDWATER?

Class VI regulations prohibit injection of CO2 into underground sources of drinking water (USDW).³⁸ Even so, under current law, sequestration operations will most often target formations that are significantly deeper than could reasonably be developed for freshwater use. Under current law, aquifer exemptions are not available for sequestration operations.³⁹ The Class VI regulations also require operators to manage injection pressures such that formation fluids and CO2 cannot migrate into formations containing USDWs.⁴⁰

WHO CAN AUTHORIZE SEISMIC OPERATIONS ON MY LAND?

Evaluating the suitability of subsurface formations for carbon sequestration may require seismic operations. Geophysical operations to explore the pore space require permission from the surface owner. This permission can be expressly granted by a pore space easement or lease, but may also be granted separately in a geophysical permit without any associated rights to inject.⁴¹ Although Wyoming courts have not considered the issue, case law from Colorado supports the conclusion that a split-estate mineral owner cannot consent to geophysical exploration of surface-owned resources.⁴²



³⁸ 020-0011-24 Wyo. Code R. § 11(c)(ii).

³⁹ 40 CFR § 144.7.

⁴⁰ 20-0011-24 Wyo. Code R. § 13(b)(i)(B).

⁴¹ See Wyo. Stat. Ann. § 34-1-152(f), providing that "the owner of any pore space right shall have no right to use the surface estate beyond that set out in a properly recorded instrument.

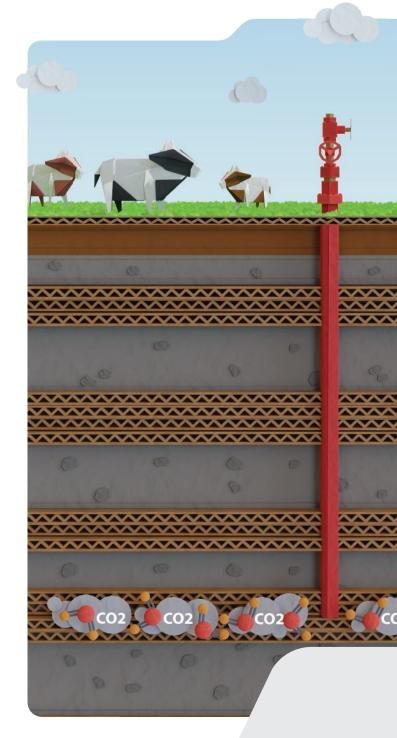
⁴² Grynberg v. City of Northglenn, 739 P.2d 230 (Colo. 1987).



The composition of CO2 streams injected into Class VI wells is highly regulated. EPA rules provide that injected CO2, by itself, is not a hazardous waste if it is transported and injected according to federal law.⁴³ This means that a CO2 stream injected for storage cannot contain any hazardous constituencies. A representative of the injector must certify to the regulator that these requirements are met.⁴⁴

These purity standards are enforced by the Wyoming DEQ. Its Class VI rules allow an injector to inject a "carbon dioxide stream," which it defines as "carbon dioxide, plus associated substances derived from the source materials and any processing, and any substances added to the stream to enable or improve the injection process." The rules specifically provide that any stream meeting the definition of a hazardous waste is not considered a "carbon dioxide stream" and could not be injected into a Class VI well. 47

In other words, when CO2 is injected into a Class VI well, no hazardous substances could also be injected.



⁴³ 40 C.F.R. § 261.4(h) (2024).

⁴⁴ Id.

⁴⁵ Section 2(n)

⁴⁶ Section 2(g)

⁴⁷ Id.



WILL CAPTURING AND SEQUESTERING CO2 BE BAD FOR PLANTS AND AGRICULTURE?

There are many different potential sources from which CO2 could be captured. Point source capture refers to CO2 that is separated from other gases, usually at power plants, ethanol facilities, or other industrial sources. Point source capture with subsequent storage does not reduce CO2 levels in the atmosphere used by plants and agriculture, although it could slow the increase in atmospheric CO2 levels if deployed globally. Carbon removal actually removes CO2 from the atmosphere, although due to the very small scale of carbon removal, it is not anticipated to negatively impact plants or crop yields.

Since plants require atmospheric CO2 to grow, some landowners in Wyoming have raised concerns about the impacts CCS could have on plants and agricultural operations. This could be a concern if atmospheric concentrations were at risk of drastically decreasing. However, decreasing total atmospheric CO2 levels would require negative global emissions, where naturally occurring absorption, capture, and uptake of CO2 exceed total emissions. This is unlikely to occur.

Global CO2 emissions currently far exceed the amount of CO2 plants or other natural CO2 sinks can absorb. ⁴⁸ For example, in 2022 global emissions added approximately 3.5 billion metric tons of CO2 to the atmosphere. ⁴⁹ By contrast, the largest carbon removal and sequestration project in the world removes about 4,000 metric tons per year. ⁵⁰ Although newly planned projects under construction are larger, ⁵¹ the total volumes removed are still negligible compared to total global emissions. The effect therefore is slowing the growth rate of global CO2 emissions, not creating negative emissions.

⁴⁸ Stephen Long et al., Food for Thought: Lower-Than-Expected Crop Yield Stimulation with Rising CO2 Concentrations, 312 SCI. 1918, 1918-1921 (2006); Hendrik Poorter & Marta Pérez-Soba, Plant Growth at Elevated CO2, in 2 THE EARTH SYSTEM: BIOLOGICAL AND ECOLOGICAL DIMENSIONS OF GLOBAL ENVIRONMENTAL CHANGE 489-96 (Harold A. Mooney &. Josep G. Canadell, eds. 2002); Andrew Moseman, Don't plants do better in environments with very high CO2? MIT CLIMATE PORTAL (Jan. 8, 2024), https://climate.mit.edu/ask-mit/dont-plants-do-better-environments-very-high-co2.

⁴⁹ Greenhouse Gas Emissions from Energy Data Explorer, INT'L ENERGY AGENCY (last visited Feb. 26, 2025), https://www.iea.org/data-and-statistics/data-tools/greenhouse-gas-emissions-from-energy-data-explorer.

⁵⁰ Orca: the first large-scale plant, CLIMEWORKS (last visited Feb. 26, 2025), https://climeworks.com/plant-orca.

⁵¹ See e.g., Occidental and BlackRock Form Joint Venture to Develop STRATOS, the World's Largest Direct Air Capture Plant, OXY (last visited Feb. 26, 2025), https://www.oxy.com/news/news-releases/occidental-and-blackrock-form-joint-venture-to-develop-stratos-the-worlds-largest-direct-air-capture-plant/.

While atmospheric CO2 can increase the rate of photosynthesis, increased CO2 alone will not benefit plants if other factors assuring plant growth – such as adequate temperatures, other required nutrients, and water availability – are limited. Descriptionally, not all plants require the same amount of atmospheric CO2, nor do they all thrive in high carbon environments. The minimum atmospheric CO2 concentration required to sustain plant life on earth is estimated at 150 parts-per-million (ppm). Even the most ambitious emissions reductions targets envision maintaining atmospheric levels of CO2 at approximately 350 ppm, well above pre-industrial levels.

CAN CO2 SEQUESTRATION CAUSE EARTHQUAKES? WILL AN EARTHQUAKE CAUSE A RELEASE OF CO2?

"Induced seismicity" refers to earthquakes associated with human activity. ⁵⁶ Unmanaged injection activities, including those from CCS operations, can induce seismicity if the CO2 injection pressurizes subsurface rock pores and fractures, thereby disturbing the equilibrium of the underground reservoir. ⁵⁷ These risks can be mitigated by appropriately characterizing and locating CCS projects. ⁵⁸ The Class VI regulatory program is designed to identify and minimize these risks through extensive reservoir characterization, monitoring requirements, and limitations on injection rates and volumes. ⁵⁹



⁵² See supra note 6.

⁵³ See Andrew Moseman, supra note 6.

⁵⁴ Rebecca Lindsey, Atmospheric Carbon Dioxide, NAT'L OCEANIC & ATMOSPHERIC ADMIN. (Apr. 9, 2024), https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide.

⁵⁵ Pre-industrial era CO2 levels that predate the widespread use of fossil fuels have been estimated at 280 ppm. See id.

⁵⁶ Induced Seismicity, ASSOC. OF AM. STATE GEOLOGISTS (last visited Feb. 20, 2025), https://www.stategeologists.org/sites/default/files/factsheets/AASG_Induced_Seismicity_Statement_2015-02-25.pdf.

⁵⁷ Yuxiang Cheng et al., Seismicity induced by geological CO2 storage: A review, EARTH-SCI. REVS., Apr. 2023, at 1-2; Bingquan Ren et al., Numerical simulations of earthquake rupture induced by pressure perturbation, 15 GEODESY & GEODYNAMICS 477 (2024).

⁵⁸ Eric Gershon, How to store CO2 without causing an earthquake, YALENEWS, Mar. 18, 2013; Yuxiang Cheng et al., supra note 15, at 1, 4.

⁵⁹ See WYO. RULES AND REGS. 020.0011.8 § 6(v)(A) (2025).





The Class VI Program regulating CCS permitting also evaluates the potential impacts of naturally occurring seismic activity on storage. Wyoming's Class VI regulations requires Class VI permit applicants to provide comprehensive information on the proposed injection site's geologic structure and reservoir properties, including: "[i]nformation on seismic history that has affected the proposed area ..., the presence and depth of seismic sources, and a determination that the seismicity will not allow fluid movement out of the injection zone."60 Regulators reviewing these permit applications are required to confirm that the seismic history data used in the application is reliable and comprehensive. 61 The reviewing regulator has discretion to impose additional requirements to mitigate these risks, including additional modeling, fault stability analysis, passive seismic monitoring, and development of seismic event response plans.62 The Wyoming DEQ also requires owners and operators of Class VI wells to maintain financial responsibility for emergencies throughout a CCS project by developing and annually updating a financial assurance cost estimate that covers both induced seismic events and "act of God" seismic events.63

⁶⁰ WYO. RULES AND REGS. 020.0011.24 § 10(xi)(C)(2025).

⁶¹ U.S. ENV'T' PROT. AGENCY, EPA 816-R-18-001, GEOLOGIC SEQUESTRATION OF CARBON DIOXIDE: UNDERGROUND INJECTION CONTROL (UIC) PROGRAM CLASS VI IMPLEMENTATION MANUAL FOR UIC PROGRAM DIRECTORS (Jan. 2018).

⁶² See 40 C.F.R. § 146.82(a) (2025).

⁶³ See WYO. RULES AND REGS. 020.0011.24 § 26) (2025); see also WYO. RULES AND REGS. 020.0011.24 APP. A (2025).

