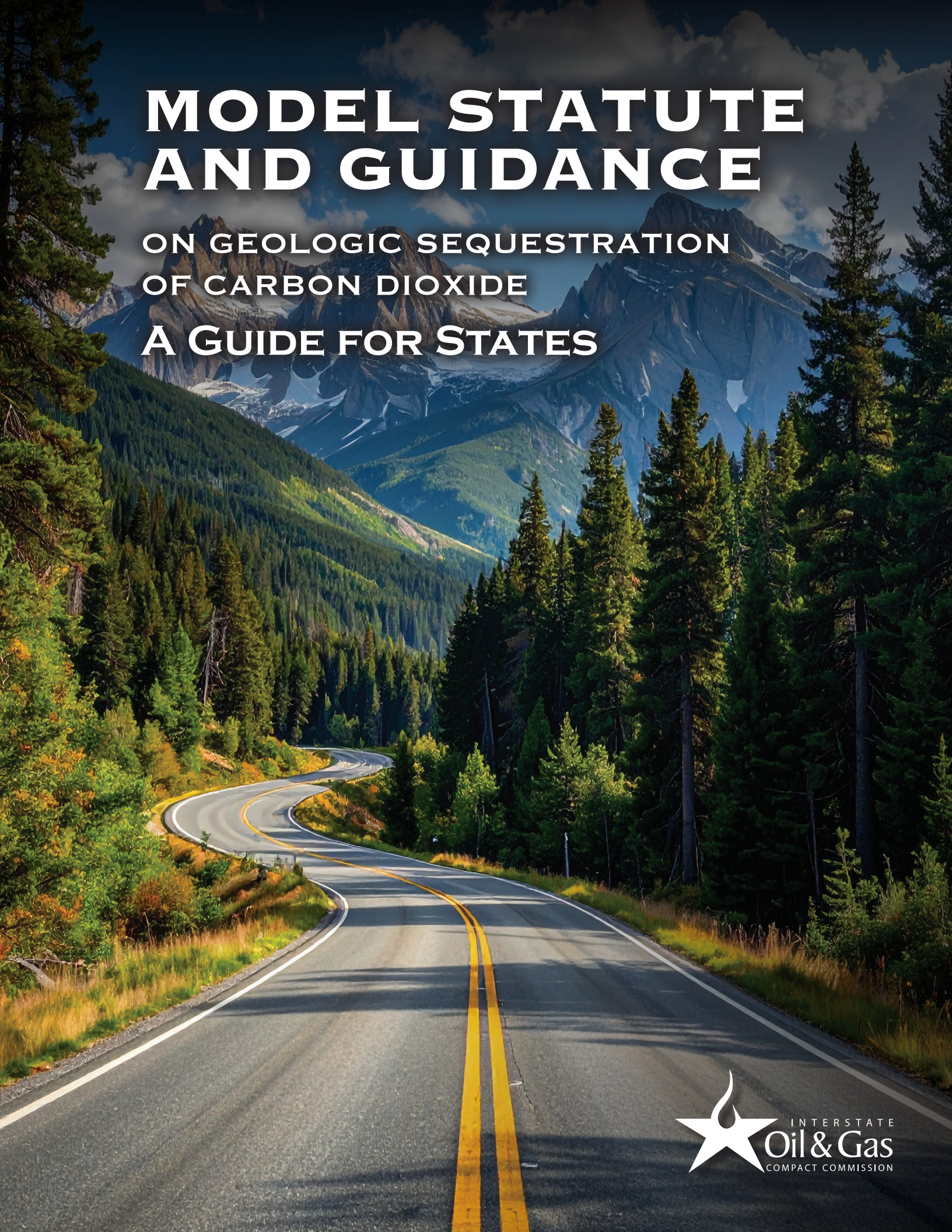

MODEL STATUTE AND GUIDANCE

ON GEOLOGIC SEQUESTRATION OF CARBON DIOXIDE

A GUIDE FOR STATES

INTERSTATE Oil & Gas COMPACT COMMISSION

Model Statute and Guidance on Geologic Sequestration of Carbon Dioxide

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2025

September 24, 2025

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ABOUT IOGCC

The Interstate Oil and Gas Compact Commission (IOGCC) is a multi-state government agency that champions the conservation and efficient recovery and storage of domestic oil and natural gas resources while protecting human health and safety and the environment. IOGCC provides member states and international affiliates with a clear and unified voice and serves as a primary authority on issues surrounding these vital resources.

ACKNOWLEDGMENTS

IOGCC produced this report through the collaborative efforts of its Legal and Regulatory Affairs Committee. The committee convened a Task Force of committee members and other subject matter experts to draft the model statute and accompanying guidance. At key stages in the drafting process, the Task Force consulted with other committee members and the oil and gas directors of the IOGCC member states.

We extend our sincere appreciation to the members of the Task Force and the many other subject matter experts, legal advisors, regulatory professionals, NGOs, and industry stakeholders who contributed their time, knowledge, and insights throughout the drafting process. Their contributions were instrumental in shaping a model statute that is both practical and adaptable to the diverse legal and regulatory landscapes across the nation.

IOGCC staff also deserve recognition. Executive Project Manager Amy Childers, Office Manager Cheryl Fitzgerald, and Executive Director Lori Wrotenbery each dedicated time and talent to the drafting and publication of this report.

DISCLAIMER

This document is intended for informational and guidance purposes only. It does not constitute legal advice, regulatory approval, or a binding policy directive. The model provisions contained herein are based on current understanding and best practices as of the date of publication and may be subject to change based on future legislative, regulatory, or scientific developments.

Users of this document are encouraged to consult with appropriate legal, technical, and regulatory professionals before implementing any model provisions or guidance. The authors and affiliated organizations disclaim any liability for actions taken or not taken based on the contents of this document.

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INTRODUCTION

The geologic sequestration of carbon dioxide represents a critical component of national and state-level energy strategies. As states consider the development of legal and regulatory frameworks to support this emerging technology, the need for clear, consistent, and adaptable statutory language has become increasingly apparent. This document serves as a legislative resource for states seeking to advance geologic sequestration projects in a way that protects public health, safeguards environmental resources, and promotes responsible energy development. It reflects a shared commitment to supporting the safe, effective, and transparent deployment of carbon management strategies.

Since 2002, the Interstate Oil and Gas Compact Commission (IOGCC) has led a multi-phase initiative to ensure that states are equipped with the legal and regulatory tools necessary to oversee the geologic storage of carbon dioxide. The original IOGCC Carbon Capture and Geologic Storage (CCGS) Task Force developed a series of foundational documents to support states and provinces in regulating the geologic storage of carbon dioxide. The initial report in 2005, which addressed legal, policy, and regulatory issues, was followed by the 2007 publication of model statutes and model rules and regulations. These models were updated in 2010 to reflect innovations from early adopting jurisdictions.

IOGCC also published key companion documents, including the 2010 report, *A Policy, Legal, and Regulatory Evaluation of the Feasibility of a National Pipeline Infrastructure for the Transport and Storage of Carbon Dioxide*, developed in partnership with the Southern States Energy Board, and the 2014 report, *Guidance for States and Provinces on Operational and Post-Operational Liability in the Regulation of Carbon Geologic Storage*, produced in collaboration with the PCOR Partnership.

In January 2023, IOGCC's Legal and Regulatory Affairs Committee convened a new task force to update the model statutes. The updated model statute and guidance reflect best practices and lessons learned from existing state programs for geologic sequestration, as well as regulatory analogs in oil and gas, underground injection control (UIC), and environmental protection.

The updated model statute, presented as **Appendix 1**, is designed to assist state legislatures and regulatory agencies in establishing comprehensive legal foundations for the safe, effective, and long-term sequestration of carbon dioxide. The guidance, presented as **Appendix 2**, offers commentary on the provisions of the model statute and other key issues.

The model statute addresses a broad range of topics essential to the governance of geologic sequestration, including jurisdictional authority, facility permitting, financial assurance, liability transfer, unitization, eminent domain, and coordination across jurisdictional boundaries. It is structured to provide flexibility for states to tailor provisions to their specific legal and policy environments while maintaining a consistent framework that supports regulatory certainty and public confidence.

The model statute primarily addresses the regulatory issues related to public health and safety and environmental protections associated with the geologic sequestration of carbon dioxide. The update does not address the regulatory issues involving carbon dioxide emissions trading and

accreditation for purposes of securing carbon credits. The Task Force believes that the issue of carbon dioxide emission trading and accreditation might best be addressed either in the marketplace and/or at the federal government level. The development and implementation of the necessary economic frameworks to provide for carbon dioxide emissions trading and accreditation is beyond the scope of this document.

The Task Force also recognizes that even in advance of state enactment of legislation, it may be necessary to permit and operate experimental and demonstration carbon dioxide sequestration projects. States are encouraged to advance those projects under existing authority rather than to delay them to await adoption of a program.

APPENDIX 1
MODEL STATUTE

Chapter 1: Geologic Sequestration of Carbon Dioxide.

Subchapter A: General provisions.

Section 1.1. Legislative declaration; jurisdiction.

(a) The Legislature of the State of _____ declares that (1) the geologic sequestration of carbon dioxide and associated movement of carbon dioxide by pipeline will benefit the citizens of the state and the state's environment by reducing greenhouse gas in the atmosphere; (2) carbon dioxide is a valuable commodity to the citizens of the state and geologic sequestration of carbon dioxide may allow for the orderly withdrawal of carbon dioxide, as appropriate or necessary, for commercial, industrial, or other uses, including enhanced recovery of oil and gas; (3) this chapter allows for the use of geologic resources for sequestration of carbon dioxide while safeguarding ownership and use of the subsurface for other purposes, including but not limited to mineral extraction, groundwater management, and artificial recharge; (4) the regulatory measures authorized by this chapter are designed to ensure the integrity and safety of facilities used in the geologic sequestration of carbon dioxide; and (5) the use of carbon dioxide pipelines, including their routing, construction, maintenance, and operation, for geologic sequestration of carbon dioxide is a public use and service, in the public interest, and a benefit to the welfare and people of the state.

(b) The [State Regulatory Agency] has exclusive jurisdiction and authority over all persons and property necessary to administer and enforce the provisions of this chapter concerning the geologic sequestration of carbon dioxide. In exercising this jurisdiction and authority, the [State Regulatory Agency] may conduct hearings, adopt and enforce rules and regulations, and issue and enforce orders concerning geologic sequestration of carbon dioxide.

(c) This chapter applies to operations injecting carbon dioxide in Class VI injection wells and may not be construed to apply to operations in other classes of injection wells as defined by 40 C.F.R. § 146.5.

Section 1.2. Definitions.

(a) **Carbon dioxide.** Anthropogenically sourced carbon dioxide of sufficient purity and quality as to not compromise the safety and efficiency of the reservoir to effectively contain the carbon dioxide.

(b) **Class VI injection well.** Injection well classified as Class VI under 40 C.F.R. § 146.5(f).

(c) **Corresponding right.** The right of all sequestration estate owners in a unit area to be equitably compensated for the use of the sequestration estates by a sequestration facility.

(d) **Geologic sequestration.** Storage of carbon dioxide in a reservoir.

(e) **Oil or gas.** Oil, natural gas, or gas condensate.

(f) **Pore space.** A cavity or void in a reservoir.

(g) **Reservoir.** Any subsurface geologic stratum, formation, or aquifer, including an oil and gas reservoir, saline formation, or coal seam, suitable for or capable of being made suitable for the sequestration of carbon dioxide.

(h) **Sequestration estate.** Ownership of the right to use pore space in a reservoir for geologic sequestration of carbon dioxide.

(i) **Sequestration facility.** The reservoir, subsurface installations and equipment, and surface buildings and equipment used in the geologic sequestration of carbon dioxide, excluding pipelines used to transport the carbon dioxide from one or more capture facilities to the site of geologic sequestration. The reservoir component of the sequestration facility includes any necessary and reasonable areal buffer and subsurface monitoring zones designated by the [State Regulatory Agency] for the purpose of ensuring the safe and efficient operation of the facility.

(j) **Sequestration operator.** Any person, corporation, partnership, limited liability company, or other entity authorized by the [State Regulatory Agency] to operate a sequestration facility.

Section 1.3. Antitrust immunity.

An order, permit, or certificate issued under this chapter, related agreements providing for joint or cooperative development of a reservoir or portion thereof, and operations conducted thereunder for the geologic sequestration of carbon dioxide do not violate statutes relating to trusts, monopolies, or contracts and combinations in the restraint of trade.

Section 1.4. Penalties.

Any person who violates any provision of this chapter or any rule or regulation adopted or order issued hereunder is subject to a civil penalty not to exceed [amount] per violation. Each day of violation shall constitute a separate offense.

Section 1.5. Severability.

If a provision of this chapter or its application to a person or circumstance is held invalid, the invalidity does not affect other provisions or applications of this chapter that can be given effect without the invalid provision or application, and to this end, the provisions of this chapter are severable.

Subchapter B: Sequestration facilities.

Section 1.11. [State Regulatory Agency] approval; recordation of order and certificate of operation of sequestration facility.

(a) A sequestration facility is hereby authorized, provided that the [State Regulatory Agency] shall first enter an order, upon application by the proposed sequestration operator and after public notice and hearing, approving the proposed geologic sequestration of carbon dioxide and designating the horizontal and vertical boundaries of the sequestration facility. Before issuing an order approving a sequestration facility, the [State Regulatory Agency] shall find as follows:

(1) That the sequestration facility, including the reservoir, is suitable and feasible for the injection and sequestration of carbon dioxide;

(2) That a good faith effort has been made to obtain the consent of the owners of at least [sixty (60)] percent of the sequestration estate acreage to be included in the sequestration facility

area and that the sequestration operator intends to acquire any remaining interest needed to operate the facility by voluntary agreement, [unitization,][1] or as otherwise allowed by statute;

(3) That the use of the sequestration facility for the geologic sequestration of carbon dioxide will not endanger any underground source of drinking water or unduly impair the ability to extract any oil, gas, coal, or other commercial mineral deposit or to operate a permitted underground injection well; and

(4) That the proposed sequestration will not unduly endanger human health and the environment and is in the public interest.

(b) Upon issuance of an order of approval, the sequestration operator shall cause the order, or a certified copy, to be recorded in the land records of each county in which any portion of the sequestration facility is to be located.

(c) Prior to commencing injection of carbon dioxide, the sequestration operator shall record in the land records of each county in which any portion of the sequestration facility is located, and with the [State Regulatory Agency], a certificate, entitled "Certificate of Operation of Sequestration Facility," which shall contain a statement that the sequestration operator has acquired by voluntary agreement, [unitization,][2] or otherwise all necessary ownership rights with respect to the sequestration facility, and the date upon which the sequestration facility shall be effective.

(d) If any depleted pool for any previously established field(s) or producing unit(s) for hydrocarbons is contained within the boundaries of the sequestration facility, the [State Regulatory Agency] may in its order of approval for the sequestration facility order that the field(s) or unit(s) be dissolved as of the effective date of the sequestration facility as set forth in the Certificate of Operation of Sequestration Facility.

Section 1.12. Protection against pollution and escape of carbon dioxide.

The [State Regulatory Agency] shall issue such orders, permits, and certificates, including establishment of appropriate and sufficient financial assurance, as may be necessary for the purpose of regulating the drilling, operation, and plugging and abandonment of wells and removal of surface buildings and equipment of the sequestration facility to prevent pollution and the escape or migration of carbon dioxide.

Section 1.13. Establishment of Sequestration Facility Trust Fund.

(a) The Sequestration Facility Trust Fund is hereby created as a special fund in the state treasury.

(b) The Sequestration Facility Trust Fund shall be an interest-bearing fund. Interest earned on monies in the fund shall be credited to the fund.

(c) Monies received under section 1.14, including fees collected by the [State Regulatory Agency] and monies received by the [State Regulatory Agency] from the sequestration operator with an application for a Certificate of Completion of Injection Operations, and penalties collected under section 1.4 for violations of this chapter shall be deposited to the credit of the Sequestration Facility Trust Fund.

(d) The Sequestration Facility Trust Fund may be used by the [State Regulatory Agency] only for the following activities related to sequestration facilities:

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[1] Inserted if the state enacts Section 1.22.

[2] Inserted if the state enacts Section 1.22.

(1) Processing applications and issuing orders, permits, or certificates;

(2) Inspecting, monitoring, investigating, recording, and reporting;

(3) Training and technology transfer related to geologic sequestration of carbon dioxide;

(4) Compliance and enforcement; and

(5) Oversight and management after the Certificate of Completion of Injection Operations is issued, including without limitation long-term monitoring, remediation of mechanical problems associated with remaining observation wells and surface infrastructure, repairing mechanical leaks, and plugging and abandoning remaining observation wells.

(e) The monies in the Sequestration Facility Trust Fund shall not relieve the sequestration operator from responsibility for maintaining financial assurance mechanisms as required under section 1.12.

Section 1.14. Fees.

(a) The [State Regulatory Agency] may impose fees to cover the cost of:

(1) Processing applications and issuing orders, permits, or certificates for sequestration facilities, inspecting, monitoring, investigating, recording, and reporting on sequestration facilities, and otherwise implementing and enforcing this chapter and the rules adopted and orders, permits, or certificates issued by the [State Regulatory Agency] under this chapter; and

(2) Oversight and management of sequestration facilities after site closure.

(b) Any fees imposed under subsection (a)(2) of this section shall be levied on a sequestration operator based on an assessment by the [State Regulatory Agency] of the present value of the anticipated cost of oversight and management of the sequestration facility, including associated wells, after site closure.

(c) Fees imposed by the [State Regulatory Agency] under subsection (a) of this section shall be segregated as follows:

(1) Fees imposed for the purpose of covering the activities described in subsection (a)(1) shall be deposited to the credit of the Sequestration Facility Trust Fund established under section 1.13; and

(2) Fees imposed for the purpose of covering the activities described in subsection (a)(2) shall be held in escrow by the sequestration operator pursuant to rules adopted by the [State Regulatory Agency], provided that such rules shall permit investment of the escrowed funds.

(d) At the time the sequestration operator applies for a Certificate of Completion of Injection Operations under section 1.15, the sequestration operator shall deposit to the credit of the Sequestration Facility Trust Fund established under section 1.13 monies accumulated in escrow pursuant to subsection (c)(2) of this section sufficient to cover the anticipated cost of oversight and management following closure of the sequestration facility, including associated wells, as determined by the [State Regulatory Agency].

Section 1.15. Liability release.

(a) At such time as the [State Regulatory Agency] may establish, the sequestration operator may apply to the [State Regulatory Agency] for a Certificate of Completion of Injection Operations. The [State Regulatory Agency] shall approve the application and issue a certificate upon demonstration by the sequestration operator that the carbon dioxide is expected to remain stable and contained, closure has been approved for all sequestration facility injection wells, the sequestration operator has deposited in the Sequestration Facility Trust Fund an amount sufficient to cover the anticipated cost of oversight and management as required by the [State

Regulatory Agency] under section 1.14, and all other applicable requirements of the [State Regulatory Agency] have been met.

(b) Except as provided in subsection (c) of this section, upon the issuance of the Certificate of Completion of Injection Operations:

(1) Ownership of the remaining components of the sequestration facility, including the stored carbon dioxide, transfers to the state;

(2) The sequestration operator shall be released from all further regulatory liability associated with the sequestration facility;

(3) Any performance bonds posted by the sequestration operator under section 1.12 and any amount remaining in escrow under section 1.14 shall be released; and

(4) Continued monitoring of the site and any future remediation activities shall become the responsibility of the [State Regulatory Agency] using monies in the Sequestration Facility Trust Fund.

(c) Regulatory liability remains with or is reimposed upon the sequestration operator to the extent that the [State Regulatory Agency] determines, after notice and hearing, that:

(1) The sequestration operator violated a state statute or regulation related to the sequestration facility that was not remedied prior to approval of the application for a Certificate of Completion of Injection Operations and any applicable statutes of limitation have not run;

(2) The sequestration operator provided deficient or erroneous information that was material and relied upon by the [State Regulatory Agency] to support issuance of the certificate;

(3) Liability arises from the sequestration operator's conduct associated with the sequestration facility that was not known to the [State Regulatory Agency] at the time the Certificate of Completion of Injection Operations was issued and that, if known, would have materially affected the [State Regulatory Agency's] decision to approve site closure; or

(4) There is fluid migration for which the sequestration operator is responsible that causes or threatens imminent and substantial endangerment to an underground source of drinking water.

(d) This section does not alter liability a sequestration operator may have for contractual or other civil obligations or for criminal violations of law.

Section 1.16. Cooperative agreements.

(a) The [State Regulatory Agency] is hereby authorized to enter into agreements with other states, tribes, and federal agencies for the purpose of regulating sequestration facilities that extend beyond state boundaries or include federal pore space.

(b) An agreement executed pursuant to this section shall ensure effective management, compliance with regulatory requirements, and coordination among the involved jurisdictions.

(c) Operators of sequestration facilities that cross state borders or include federal pore space are required to obtain pore space rights in all affected jurisdictions, irrespective of differences in pore space ownership laws and Class VI permitting primacy.

(d) The [State Regulatory Agency] shall seek to obtain agreements that address and reconcile any regulatory inconsistencies between jurisdictions to facilitate effective facility management.

(e) The [State Regulatory Agency] shall explore and implement potential incentives for states and tribes in which a sequestration facility is located.

(1) Incentives may include, but are not limited to, mechanisms to credit jurisdictions accepting carbon dioxide generated from other areas.

(2) The [State Regulatory Agency] shall report annually to the legislature on the development and implementation of such incentives.

(f) If applicable, the [State Regulatory Agency] shall engage with the Bureau of Land Management (BLM) and other relevant federal agencies to ensure a clear understanding of policies and regulations regarding multi-state sequestration facilities or sequestration facilities including federal pore space.

(1) The purpose of this engagement shall be to facilitate effective management and oversight of cross-jurisdictional sequestration facilities.

(2) The [State Regulatory Agency] shall report annually to the legislature on the status and outcomes of these engagements.

(g) Where a sequestration facility will cross jurisdictional boundaries, the [State Regulatory Agency] is authorized to execute Memoranda of Understanding (MOU) to establish the responsibilities and coordination between the jurisdictions, including states and tribes.

(1) An MOU shall, at a minimum, address:

(i) Regulatory oversight responsibilities;

(ii) Monitoring and reporting requirements;

(iii) Enforcement procedures;

(iv) Financial assurance mechanisms; and

(v) Dispute resolution processes.

(2) The [State Regulatory Agency] shall maintain a public record of all MOUs entered into under this section.

(h) No later than [specified date] each year, the [State Regulatory Agency] shall submit an annual report to the [relevant legislative committees] detailing:

(1) The status of all cross-jurisdictional sequestration facilities;

(2) Any agreements entered into under this section;

(3) Progress on implementing incentives under this section;

(4) Outcomes of any federal agency coordination efforts under this section; and

(5) A summary of MOUs established under this section.

Section 1.17. Conflicts between sequestration facilities and other activities.

(a) Any regulatory agency with jurisdiction over wells that may be drilled through or otherwise adversely impact the physical integrity of a sequestration facility shall adopt rules or issue permit conditions that are necessary and reasonable to avoid, minimize, or mitigate adverse impacts. These rules or permit conditions shall address drilling, well stimulation and completion, well construction including material compatibility, notification requirements, well testing, and well closure.

(b) Should a sequestration operator or any regulatory agency with jurisdiction over wells become aware of a well that penetrates or may otherwise adversely impact the physical integrity of the sequestration facility, the sequestration operator shall evaluate whether the well may have an adverse impact on the sequestration facility.

(c) If an adverse or a potential adverse impact is identified, the sequestration operator shall report it to the [State Regulatory Agency] and take appropriate corrective action as required and approved by the [State Regulatory Agency]. The sequestration operator shall notify the operator of the impacting well and any other state regulatory agency with jurisdiction over the impacting well.

(d) A sequestration operator, a mineral owner, a mineral lessee, or a permitted underground injection well operator may petition the [State Regulatory Agency] to establish or amend conditions of the sequestration facility order to avoid, minimize, or mitigate demonstrated

adverse impacts to the cognizable interests of a mineral owner, mineral lessee, or permitted underground injection well operator.

Section 1.18. Induced seismicity management.

(a) The [State Regulatory Agency] shall take reasonable steps to manage and require sequestration operators to manage the risks of induced seismicity associated with sequestration facilities.

(b) The [State Regulatory Agency] may require the sequestration operator to deploy, maintain, and monitor, for as long as necessary, an appropriately calibrated seismicity monitoring system for a sequestration facility. The seismic monitoring system shall be designed to determine as reasonably practicable, within a defined area in the vicinity of the sequestration facility that is acceptable to the [State Regulatory Agency], the presence or absence, magnitude, and hypocenter location of seismic activity with a minimum magnitude of completeness that is two magnitude units below a local magnitude threshold made applicable to the facility pursuant to subsection (c) of this section.

(c) When determining a local magnitude threshold for a seismicity monitoring system required pursuant to subsection (b) of this section, the [State Regulatory Agency] shall take into account relevant factors, including without limitation geologic setting, known faults, previous seismic activity, economic and technological considerations, potential hazards to infrastructure or other property, public safety and the degree of public concern regarding events of particular magnitudes, and potential hazards to underground sources of drinking water and containment of injected carbon dioxide. The [State Regulatory Agency] may use a single threshold throughout the state, may create different thresholds for different regions, or may create different thresholds for different sequestration facilities or different portions of a single sequestration facility.

(d) If the [State Regulatory Agency] requires a seismicity monitoring system pursuant to subsection (b) of this section, the sequestration operator shall collect and analyze the data acquired and other relevant data to determine whether the risk of inducing a seismic event of the magnitude applicable to the sequestration facility pursuant to subsection (c) of this section is significantly increased by carbon dioxide injection. The sequestration operator shall report results of the risk analysis and the underlying data as required by the [State Regulatory Agency]. The risk analysis shall be updated as frequently as the [State Regulatory Agency] determines necessary.

(e) If the sequestration operator or the [State Regulatory Agency] determines that the risk of inducing a seismic event of the magnitude applicable to the sequestration facility pursuant to subsection (c) of this section is significantly increased by carbon dioxide injection, the sequestration operator shall modify injection rates and/or volumes or take other mitigation steps it considers reasonable unless other actions are required by the [State Regulatory Agency].

Section 1.19. Enhanced recovery operations.

The [State Regulatory Agency] is expressly authorized to allow conversion of an existing enhanced recovery operation into a sequestration facility. Upon approval of the conversion, the provisions of this chapter shall apply.

Subchapter C: Sequestration estate[and unitization][3].

Section 1.21. Sequestration estate.

(a) If ownership of the sequestration estate has not been separately severed, conveyed, or reserved pursuant to subsection (c) of this section, ownership of the sequestration estate in the state is vested in the owner of the overlying surface estate.

(b) Except as provided by section 1.15(b)(1) or section 1.22(c)(6) or (j), ownership of carbon dioxide and the facilities and equipment that sequester carbon dioxide in the state is vested in:

(1) The sequestration operator; or

(2) Any person conveyed title to the carbon dioxide or the facilities and equipment that sequester the carbon dioxide by the sequestration operator.

(c) Ownership of a sequestration estate may be:

(1) Severed from the ownership of the overlying surface estate; and

(2) Conveyed or reserved in the same manner as ownership of a mineral estate.

(d) Any conveyance of the ownership of an overlying surface estate also conveys all the grantor's ownership of any sequestration estate unless:

(1) The conveyance instrument expressly reserves the sequestration estate, including by broad reservation of pore space; or

(2) The sequestration estate has been previously severed, by reservation or conveyance, from the ownership of the overlying surface estate.

(e) A conveyance of the ownership of a mineral estate or another subsurface interest does not convey the grantor's ownership in the sequestration estate unless the conveyance instrument expressly provides for conveyance of the grantor's ownership of the sequestration estate.

(f) A conveyance of the ownership of a sequestration estate does not convey any right to enter upon or otherwise use the surface of the property unless the conveyance expressly so provides.

(g) Notwithstanding any provision of law to the contrary, nothing in this section:

(1) Affects any ownership or rights to pore space, a sequestration estate, or carbon dioxide or facilities and equipment that sequester carbon dioxide that are acquired or reserved before the effective date of this chapter;

(2) Changes or alters the common law as of the effective date of this chapter, as it relates to the ownership of real property, including surface estates, pore space, or a mineral estate, or to the rights or dominance of a mineral estate; or

(3) Affects the ability of an owner of pore space to:

(i) Broadly convey or reserve all the owner's right, title, and interest in and to pore space, including the owner's interest in a sequestration estate; or

(ii) Convey or reserve any right, title, or interest in and to estates in pore space other than the sequestration estate.

(h) Transfers of sequestration estate rights made after the date of this chapter are null and void at the option of the owner of the surface estate if the transfer instrument does not contain a specific description of the location of the sequestration estate being transferred. The description may include but is not limited to a subsurface geologic or seismic survey or a metes and bounds description of the surface lying over the transferred sequestration estate. In the event a description of the surface is used, the transfer shall be deemed to include the sequestration estate at all depths underlying the described surface area unless specifically excluded. The validity of

[3] Inserted if the state enacts Section 1.22.

sequestration estate rights under this subsection shall not affect the respective liabilities of any party, and such liabilities shall operate in the same manner as if the sequestration estate transfer were valid.

(i) Nothing in this section shall alter, amend, diminish, or invalidate rights to the use of subsurface sequestration estates that were acquired by contract or lease prior to the effective date of this chapter.

Section 1.22. Unitization.

(a) Upon application of the sequestration operator or the owner of a sequestration estate within the sequestration facility and after public notice, the [State Regulatory Agency] shall conduct a hearing to consider the need for unit operation of a reservoir or portion thereof . The [State Regulatory Agency] shall issue an order requiring unit operation if it finds that unit operation of the reservoir or portion thereof is reasonably necessary for the geologic sequestration of carbon dioxide or to protect corresponding rights. An order for a unit operation may provide for a unit operation of less than the whole of a reservoir so long as the unit area is of size and shape reasonably required for that purpose and the conduct thereof will have no significant adverse effect upon other portions of the reservoir.

(b) An application for unitization shall contain, at a minimum, a description of the proposed unit and the vertical limits to be included therein with a map or plat thereof attached; a statement that the reservoir or portion thereof involved in the application area has been reasonably defined based on site characterization and modeling conducted pursuant to the federal Safe Drinking Water Act, 42 U.S.C. § 300f et seq., as amended, and any rules established by the applicable underground injection control program(s); a statement of the type of operations contemplated for the unit area; the proposed plan of unitization; and a proposed operating plan that addresses the manner in which the unit will be supervised and managed and sequestration estate owners will be equitably compensated. The [State Regulatory Agency] may, by rule, impose additional requirements for an application for unitization.

(c) The terms and conditions of an order for a unit operation must be just and reasonable and shall include the following:

(1) a precise definition of the vertical and horizontal limits of the unit area;

(2) a statement of the nature of the operation contemplated;

(3) a provision designating the sequestration operator as operator of the unit;

(4) a provision for recording in the land records of each county in the unit area documents sufficient to give constructive notice of the establishment of the unit operation respecting all lands included in the unit area;

(5) a provision to protect corresponding rights, allocating to each separately owned sequestration estate in the unit area just and equitable compensation for use of the reservoir for geologic sequestration of carbon dioxide;

(6) the manner in which, and the circumstances under which, the unit operation can be terminated and the unit dissolved; and

(7) additional provisions found to be appropriate to carry on the unit operation and to protect corresponding rights.

(d) The [State Regulatory Agency], upon its own motion or upon the application of an owner of an interest in a sequestration estate within the unit area, may for good cause terminate a unit operation and dissolve the unit on just and equitable terms. If not terminated earlier, the unit operation shall terminate upon issuance of a Certificate of Completion of Injection Operations.

At the time of dissolution of the unit operation, the sequestration operator shall file with the [State Regulatory Agency] and record in the land records of each county in the unit area documents sufficient to give constructive notice of the dissolution of the unit operation respecting the lands that were included in the unit area.

(e) An order requiring a unit operation shall not become effective until the operating plan approved by the [State Regulatory Agency] has been signed and approved in writing by the owners of at least [sixty (60)] percent of the sequestration estate acreage proposed to be included in the unit area. The operating plan is subordinate to the terms of an order requiring a unit operation and to an order amending an order requiring a unit operation.

(f) The [State Regulatory Agency] may approve additions to the unit of portions of a reservoir not previously included within the unit and may extend the unit area as reasonably necessary for the geologic sequestration of carbon dioxide or to protect corresponding rights. The [State Regulatory Agency] may approve exclusions from the unit area as reasonably necessary for the geologic sequestration of carbon dioxide or to protect corresponding rights. An order adding to or excluding from a unit area must be upon just and reasonable terms. An order to provide for an addition to a unit area may not become effective until approved by the owners of at least [sixty (60)] percent of the sequestration estate acreage in the area to be added to unit operation under the terms of the order. An order providing for an exclusion from a unit area may not become effective until approved by the owners of at least [sixty (60)] percent of the sequestration estate acreage in the original unit area, but if the [State Regulatory Agency] determines that the area to be excluded does not overlie the reservoir, then the order excluding the area shall become effective without approval of owners.

(g) An order providing for unit operation may be amended by an order of the [State Regulatory Agency] in the same manner and subject to the same conditions as an original order providing for the unit operation.

(h) Operations, including the commencement, drilling, or operation of a well, upon a portion of a unit area, are deemed conducted on each separately owned tract in the unit area by the sequestration estate owner or owners thereof.

(i) Except to the extent that all affected parties agree, an order providing for unit operation does not result in a transfer of all or part of a person's title to the sequestration estate in a tract in the unit area.

(j) The creation of a unit operation shall not constitute approval or permitting of underground injection operations for a well or wells. Injection operations must be separately approved and permitted.

(k) The creation of a unit operation shall not constitute approval or permitting of the use of fresh water. Use of fresh water must be separately approved and permitted.

(l) The [State Regulatory Agency] may issue an order for the unit operation of a reservoir or reservoirs or parts thereof that include a unit created by a prior order of the [State Regulatory Agency] or by voluntary agreement.

Subchapter D: Eminent domain and pipelines.

Section 1.31. Common carriers.

Every person owning, operating, or managing any pipeline or part of any pipeline within the state for the transportation of carbon dioxide to or for the public for hire, or engaged in the business of transporting carbon dioxide by pipelines, is hereby declared to be a common carrier.

Section 1.32. Eminent domain.

Every carbon dioxide common carrier that has filed with the state its acceptance of the applicable provisions of the law shall have the right and power of eminent domain.
In exercising eminent domain, the common carrier may enter upon and condemn the land, right-of-way, easements, and property of any person necessary for the construction, maintenance, or operation of its pipeline. Such power shall be exercised under the procedure provided by other applicable laws relating to eminent domain.

Section 1.33. Preemption.

The state reserves unto itself all rights, powers, privileges, and immunities not preempted by federal interstate commerce laws and regulations in the right-of-way leasing of any state land for carbon dioxide pipeline construction, maintenance, or operation within its boundaries. Notwithstanding any other provision of the law to the contrary, no political subdivision of the state may regulate any aspect of the construction, maintenance, or operation of a carbon dioxide pipeline except as expressly authorized pursuant to state law.

Section 1.34. Agricultural land and topsoil restoration.

(a) Any agricultural land and topsoil disturbed by the construction of a carbon dioxide pipeline pursuant to eminent domain authority shall be repaired and restored in reasonably close conformity to preconstruction conditions.

(b) Any person conducting survey work for a proposed carbon dioxide pipeline pursuant to eminent domain authority shall notify all affected property owners in writing that:

(1) Any agricultural drainage tile that is damaged or removed will be replaced or repaired to preconstruction working conditions, and

(2) Topsoil disturbed by construction or repair of such pipeline will be separated and replaced.

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APPENDIX 2
GUIDANCE

Guidance on Chapter 1: Geologic Sequestration of Carbon Dioxide.

Guidance on Subchapter A: General provisions.

Jurisdiction (Section 1.1(b)).

The Task Force discussed the most appropriate state regulatory entity to implement the rules and regulations, but ultimately each state will have to make its own decision in this regard. Because the analogs for the majority of the proposed regulations are based on natural gas storage and oil and gas injection well rules, states might well conclude that the most logical and best equipped lead agency for implementing and administering regulations in an effective and efficient fashion would be the state oil and gas regulatory agency. However, other states, especially those without an existing oil and gas regulatory framework, might choose to designate another regulatory agency, such as an environmental agency or public utility commission, as the lead agency for the state. In any event, close cooperation between the oil and gas regulatory agency and the agency with authority over the underground injection control (UIC) program for wells outside the oil and gas industry will be necessary if more than one agency is involved. The model statute uses brackets to denote where the state should insert the name of the designated state regulatory agency or agencies, if authority is divided as is true in some states.

The Task Force discussed several considerations for states in relation to preemption of local authority to regulate carbon dioxide injection. First, the Task Force determined that states, in particular through their oil and gas regulatory agencies, are best suited to regulate carbon dioxide injection. State oil and gas regulatory agencies typically employ technical experts such as engineers and scientists who are suited for regulating carbon dioxide transport and sequestration. Local or other government entities do not typically have the resources necessary to hire the technical experts needed to provide regulatory oversight.

Second, states could jeopardize their UIC Class VI primacy agreements with the United States Environmental Protection Agency (USEPA) if local or other government entities enact their own rules and regulations. The federal Safe Drinking Water Act authorizes states, tribes and territories to assume primacy, but does not allow for local or other government entities to exercise responsibility. If a state's jurisdiction is compromised or delegated to a local or other government entity, a violation of the state's implementation plan could occur, leading to a federal overfiling by the USEPA.

Lastly, several states have set precedent regarding preemption in oil and gas policy. For example, North Dakota has a well-established precedent related to state oversight of oil and gas policy. In

a 1985 Attorney General's Opinion, N.D.A.G. 85-02, it was determined that counties, in the absence of specific authority from the legislature, have no authority to regulate the reclamation of reserve pits on oil and gas well sites. Further, a 1990 Attorney General's Opinion, N.D.A.G. 90-23, stated that due to the comprehensiveness of state regulation of oil and gas, "the North Dakota Legislature intended to preempt local regulation in this area." Again in 2010, an Attorney General's Opinion, N.D.A.G. 2010-L-01, declared that counties lack zoning authority over oil and gas operations, noting that "counties are creatures of the constitution and may speak and act only in the manner and on the matters prescribed by the Legislature in statutes enacted pursuant to constitutional authority." In *Environmental Driven Solutions, LLC v. Dunn County* (2017 ND 45), the North Dakota Supreme Court concurred that a county "has no authority through its zoning regulations to veto the [Industrial] Commission's siting of an oil and gas waste treating plant."

In Texas, House Bill 40 was passed in 2015 (Tex. Nat. Res. Code Ann. § 81.0523) to give the Railroad Commission of Texas exclusive jurisdiction over oil and gas permitting, preventing a local government from "effectively prohibit[ing] an oil and gas operation conducted by a reasonably prudent operator." Likewise, Ohio Revised Code § 1509.02 gives sole and exclusive oil and gas permitting jurisdiction to its Division of Oil and Gas Resources Management. Preemption of local ordinances was challenged and upheld by the Supreme Court of Ohio in *Newbury Township Board of Township Trustees v. Lomak Petroleum (Ohio), Inc.*, 62 Ohio St.3d 387 (1992*)*.

It follows that as regulation of carbon dioxide transportation and sequestration is primarily overseen by oil and gas regulatory agencies with clear legal precedent for state preemption of local regulation, that preemption should also be applied to state UIC Class VI programs. Therefore, the Task Force recommends that legislatures clearly state their intent to delegate authority to their respective state regulatory agencies and preempt local government authority.

Applicability (Section 1.1(c)).

The Task Force discussed the applicability of the model statute relative to Classes I-V of the USEPA's UIC program. The Task Force acknowledged that each of the other classes of injection well are unique and warrant their own legal and regulatory frameworks. The Task Force does not intend any of the model statute provisions to apply to Classes I-V underground injection wells, and recommends that state legislatures clearly indicate a legislative intent to cover only Class VI underground injection wells.

The Task Force discussed the applicability of the model statute to carbon dioxide injection in enhanced oil recovery (EOR) projects, as well as to carbon dioxide injection for sequestration in non-EOR applications, such as sequestration in depleted oil and gas reservoirs, deep saline formations, and coal seams. The Task Force does not intend the model statute to apply to EOR projects during their normal working life except to the extent an EOR project operator may propose to simultaneously permit the EOR project as a sequestration facility. The Task Force assumed that conversion of an EOR project to a sequestration facility generally would occur at the end of the normal operating life of the EOR project. An operator desiring that an EOR project

be simultaneously used for geologic sequestration or converted to be used only for geologic sequestration could submit that project for approval under this statute.

Although the potential of developing different provisions to deal with ongoing or former EOR and non-EOR geologic projects was discussed, the Task Force concluded that the similarities were greater than the differences. Consequently, one set of provisions was written to accommodate both scenarios and, thus, the model statute is designed to have general applicability.

Definitions (Section 1.2).

The Task Force has provided definitions for many of the terms used throughout the model statute. The reader should note that several new terms were developed to clearly define the various aspects and stages of a carbon dioxide sequestration project. These terms, such as geologic sequestration and sequestration facility, are used extensively throughout the model statute. Familiarity with these and other definitions will assist the reader in reviewing and applying the model statute.

"Carbon dioxide" is defined in the model statute. Although the 2005 model statute defined carbon dioxide as a direct emissions stream with purity in excess of 95 percent or a processed emission stream with commercial value, after much discussion this definition was modified in 2008 to accommodate the evolving capture technologies and new research regarding reservoir storage capabilities. In addition, the 2008 definition only addressed anthropogenically sourced carbon dioxide which is produced as a byproduct of combustion in the industrial process (including carbon dioxide generated from oil and gas production and processing operations) and not non-hydrocarbon associated geologically occurring carbon dioxide. The Task Force discussed and is cognizant of the many complexities involving transportation and injection of carbon dioxide of varying quality. In addition to quality requirements for transportation of carbon dioxide, ultimately it will be up to the state regulatory agency to decide what is and what is not suitable to long-term geologic sequestration.

Guidance on Subchapter B: Sequestration facilities.

Establishment of a sequestration facility trust fund (Section 1.13).

Section 1.13 of the model statute creates a special-purpose fund to finance sequestration facility regulatory oversight for the duration of the project's lifetime, from initial permitting through closure, post-injection site care, and indefinitely thereafter as the state assumes responsibility for any further site monitoring and maintenance activities under Section 1.15 of the model statute. Some states might want to establish multiple funds for different phases of the sequestration facility lifecycle oversight. For example, North Dakota and Illinois have each established a separate administrative fund to support regulatory activities during the permitting and operational phases.

States have taken a variety of approaches for how these funds may be used both during the operational phase and after closure and certification of completion. Uses of funds during the operational phase include the state regulatory agency's administrative expenses, training, and support for emergency responders to address potential events involving pipelines or sequestration facilities, public education, and community engagement. Some states have included specific requirements or authority for the agency managing the fund to transfer monies to other state agencies or other jurisdictions to implement related activities. After closure, funds are typically used for monitoring, management of closed sites, and remediation if necessary and not attributable to operators.

Fees (Section 1.14).

Section 1.14 of the model statute establishes the state regulatory agency's authority to collect fees from sequestration operators for project-life costs as well as post-closure monitoring and maintenance costs that may accrue to the state. Subsection (a) provides two categories of fees that may be collected, with Subsection (a)(1) covering project-life costs and Subsection (a)(2) covering post-closure costs. Subsection (b) provides a directive to the state regulatory agency to assess the present value of post-closure monitoring and maintenance costs and levy fees under Subsection (a)(2) on that basis.

Subsection (c) bifurcates the target location of fees collected under Subsection (a). Fees to cover project-life operations are deposited directly into the fund established in Section 1.13, while fees collected for post-closure costs are to be held in escrow by the sequestration operator. This subsection further directs the state agency to promulgate rules on such escrow accounts, including a requirement that the funds in such accounts be investable. The purpose of these rules is to ensure those funds are available at the time they are needed and not otherwise appropriated in advance of site closure.

Finally, Subsection (d) provides that the sequestration operator will deposit escrowed funds sufficient to cover anticipated oversight costs into the fund established in Section 1.13 upon application for a Certificate of Completion of Injection Operations under Section 1.15. Only funds equivalent to the amount of anticipated need shall be deposited to the fund, while the remainder will be released from escrow upon issuance of the Certificate of Completion of Injection Operations. These provisions of Sections 1.14 and 1.15 are designed to ensure that the state regulatory agency is neither underfunded nor overfunded for anticipated future needs, while reducing the overall financial burden on the sequestration operator. Fees collected are not intended to relieve the sequestration operator of the obligation to maintain financial assurance required by UIC Class VI rules.

Liability release (Section 1.15).

Throughout the life of a carbon sequestration project, all liability and responsibility for issues pertaining to operations at the site reside with the sequestration operator. Given the unique, permanent nature of carbon sequestration projects, questions may arise as to the long-term liability and responsibility for the site and stored carbon after a project is completed and closed–a point in time that can arise decades from the initiation of injection. In some instances, state

legislatures may deem it necessary and appropriate to address this potential uncertainty in responsibility by adopting provisions for the transfer of liability and/or long-term stewardship for sequestration facilities. Section 1.15 of the model statute provides for this transfer, including the conditions that must be met for transfer and circumstances under which regulatory liability should remain with or be reimposed on the sequestration operator.

It should be noted that Section 1.15 is limited only to the release of regulatory liability associated with a particular sequestration facility. While some state legislatures have adopted variations on the themes presented here, the framework for liability release in the model statute is considered sufficient to address the concerns of owners, operators, investors, insurers, regulators, and legislators while avoiding negative public policy or federal compliance implications–such as concerns about meeting the minimum enforcement requirements necessary for a state to seek UIC Class VI primacy.

The USEPA referred to emergency authority under the Safe Drinking Water Act (SDWA) in the preamble for the UIC Class VI rule (75 Fed. Reg. 77230, 77272 (Dec. 10, 2010)) by stating: "an owner or operator may always be subject to an order the Administrator deems necessary to protect the health of persons under section 1431 of the SDWA after site closure if there is fluid migration that causes or threatens imminent and substantial endangerment to a USDW." Reiterating this point in response to comments during the recent approval of the State of Louisiana's UIC Class VI primacy application (89 Fed. Reg. 703, 708 (Jan. 5, 2024)), the USEPA added ". . . even after the former permittee has fulfilled all of its UIC regulatory obligations, it may still be held liable for previous regulatory noncompliance. Thus, there may be stringency issues if a state law authorizes the permitting agency to release a former permittee from liability for earlier UIC violations." The language in the model statute, and in particular the carefully crafted exceptions to liability release and transfer, are intended to avoid the "stringency" issues EPA describes.

Section 1.15(a) establishes the state-specific conditions that must be met to receive a Certificate of Completion of Injection Operations from the state regulatory agency, which is a prerequisite for liability release. The model statute allows the Agency to establish additional conditions but presents a set of baseline minimum requirements: demonstration of stable containment of the injected carbon dioxide, approved closure of all wells, and sufficient funds deposited into the Sequestration Facility Trust Fund.

Section 1.15(b) outlines the actions that are triggered, except as provided in Section 1.15(c), by the issuance of the Certificate of Completion of Injection Operations:

(1) Transfer of ownership from the sequestration operator to the state of the remaining components of the sequestration facility, including the stored carbon dioxide;

(2) Release of the sequestration operator from all further regulatory liability associated with the sequestration facility;

(3) Release of performance bonds and remaining escrow; and

(4) Transfer to the state regulatory agency of responsibility for continued monitoring and any future remediation activities using money in the Sequestration Facility Trust Fund.

Some states may elect to exclude ownership of the pore space itself from the transfer of ownership from the operator to the state. States should consider how to assure the state has the rights to access the facility and to allow carbon dioxide to remain in place.

Section 1.15(c) describes four exceptions to the releases and transfers described in Section 1.15(b). In each case, the state regulatory agency must provide notice and hold a hearing to determine whether the exception applies. Circumstances that could result in regulatory liability remaining with or returning to the sequestration operator are:

(1) Violation of a state statute or regulation that is related to the sequestration facility and was not remedied before the state regulatory agency approved a Certificate of Completion of Injection Operations. This section is inapplicable if any applicable statutes of limitation have run.

(2) Provision of deficient or erroneous information that was material and relied upon by the state regulatory agency in making the decision to issue a Certificate of Completion of Injection Operations.

(3) New information is surfaced regarding the sequestration operator's conduct associated with the sequestration facility that, if known at the time, would have materially changed the state regulatory agency decision to approve site closure.

(4) The operator is responsible for fluid migration that causes or threatens imminent and substantial endangerment to an underground source of drinking water (USDW).

Section 1.15(d) makes clear that the liability release under Section 1.15(b) does not alter liability a sequestration operator may have for anything except regulatory liability associated with the sequestration facility. There is no release of contractual or other civil obligations or liability for criminal violations of the law.

Facilities that cross jurisdictional boundaries (Section 1.16).

The model statute establishes a framework for fostering cooperation involving interstate and border issues related to a UIC Class VI well and the related sequestration facility. The model statute allows sequestration operators to obtain a sequestration facility permit for a portion of a sequestration facility that is within the state even though the portion of the sequestration facility with injection wells is outside of the state. The ability to obtain a sequestration facility permit also allows the sequestration operator to obtain unitization of the portion sequestration reservoir that lies within the state even if other portions of the reservoir are outside the state. To address multi-state facilities and other facilities that cross jurisdictional boundaries, the state enacting the model statute should consider the following topics:

Ownership and regulation: With respect to geological sequestration that crosses borders, it is recognized that there may be inconsistencies in pore space ownership and applicable regulatory requirements. The model statute therefore provides that a sequestration operator would be obligated to acquire pore space rights in all states affected by sequestration even if pore space ownership differed from state to state and regardless of UIC Class VI permitting primacy. The state should be sure that permitting and unitization are available to out-of-state operators and may want to clarify that availability during the legislative process. In addition, the model statute calls upon states to obtain agreements to address and reconcile regulatory inconsistencies.

Incentives: In addition to addressing pore space and regulatory requirements, the model statute requires that consideration be given to offering incentives to the state that would host the sequestration facility. Such incentives may include, but are not limited to, mechanisms to credit jurisdictions accepting carbon dioxide generated from other areas.

BLM coordination: The model statute also calls for states, where appropriate, to engage the BLM in discussions about border issues to ensure that there is a clear understanding of their policies on multi-state sequestration projects.

UIC Class VI regulations and guidance: USEPA's UIC Class VI regulation and related guidance specifically recognize the need to address interstate and border issues not only to satisfy mandatory requirements of the Class VI program but also to address coordination among agencies and the surrounding communities. Specifically, this guidance urges that bordering states enter into a memorandum of understanding related to Class VI operations that cross boundaries.

Upon consideration of this background information, the Task Force offers the following draft Memoranda of Understanding (MOUs) for consideration.

Attachment A: BLM and State MOU.
Attached and identified as Attachment A is a draft MOU between a state and the BLM related to a sequestration facility.
Attachment B: Border States MOU
Attached and identified as Attachment B is a draft of an MOU between two states.

Conflicts between sequestration facilities and other activities (Section 1.17).

The purpose of Section 1.17 of the model statute is to address potential conflicts between sequestration facilities and other subsurface activities including mineral extraction and underground injection. With proper site selection, operation, and maintenance, sequestration facilities are expected to maintain integrity, i.e., the stored carbon dioxide will remain where expected and permitted. However, penetrations of the sequestration facility itself or its confining zone creates a risk of plume migration–and it is thus advisable to avoid unnecessary penetrations in the vicinity of the sequestration facilities. However, this is sometimes unavoidable–for example, owners of minerals underneath a sequestration facility have the right to access those minerals. In such cases, the state should take care to ensure that sequestration facilities and other subsurface operations minimally impact each other, with a focus on health, safety, and the environment (HSE), and on protecting underground sources of drinking water (USDWs) and correlative and corresponding rights.

The model statute provides a basic framework for doing so, leaving the technical and operational details to the expertise of the relevant state agency(ies). Section 1.17(a) provides for a regulator overseeing wells that may be drilled through or otherwise adversely impact the physical integrity of a sequestration facility to establish rules or permit conditions to avoid, minimize, or mitigate adverse impacts. Section 1.17(b) requires a sequestration operator to conduct an evaluation on discovery of a third-party well that may adversely impact the physical integrity of the sequestration facility. Section 1.17(c) creates reporting, notification, and corrective action

requirements for a sequestration operator who identifies an adverse or potential adverse impact, where corrective action is developed in consultation with the regulator overseeing the sequestration facility. Section 1.17(d) gives a mineral owner, a mineral lessee, or a permitted injection well operator a right to petition the regulator overseeing the sequestration facility to modify the sequestration facility permit to reduce impacts on the petitioner's interests.

Taken together, these provisions do not privilege any operator or geological use over another, but instead provide an avenue for communication, notification, modification, and corrective action as needed. It will be up to the state agency(ies) involved to decide how best to balance the equities to achieve desired outcomes related to HSE, USDWs, and correlative and corresponding rights.

Induced seismicity management (Section 1.18).

Section 1.18 of the model statute gives the state regulatory agency flexibility to approve site specific monitoring strategies based on local geology and risk that allow for collection of relevant data to effectively assess the risk of seismic events at the specified range of concern and require appropriate mitigation efforts. Section 1.18(a) provides a broad grant of authority to manage the risks of induced seismicity that includes but is not limited to the more specific provisions that follow.

Section 1.18(b) gives the state regulatory agency discretion to require seismicity monitoring systems. Where monitoring is required, the system must be designed with a minimum magnitude of completeness that is two orders of magnitude below the local magnitude threshold referenced in Section 1.18(c). A minimum magnitude of completeness is the magnitude above which there is reasonable certainty that seismic events of that size or larger are recorded. Based on a statistical relationship between small earthquakes and larger earthquakes described by Richter and others, collecting data two orders of magnitude below the local magnitude threshold enables the risk analysis that is addressed in Section 1.18(d). States may have reasons to select different monitoring designs.

While the model statute uses magnitudes for seismicity monitoring and management, it should be noted that a state might choose instead (or in addition) to use a different metric, such as ground shaking.

Section 1.18(c) identifies a number of factors that the state regulatory agency should take into account when determining a local magnitude threshold. In many cases the agency will be interested in using the threshold to anticipate and/or seek to prevent "felt" seismicity; thus agencies have wide latitude to determine what local magnitudes are of interest.

Section 1.18(d) provides that if the state regulatory agency requires a seismicity monitoring system pursuant to Section 1.18(b), the operator shall collect and analyze the data acquired, as well as other data, to determine whether the risk of inducing a seismic event of the magnitude selected pursuant to Section 1.18(c) is significantly increased by injection. The sequestration operator is also required to report the results of the risk analysis and the underlying data as required by the state regulatory agency. The extent to which these analyses and data are public is not addressed in the model statute and is presumably addressed by other provisions of law.

If the analyses required by Section 1.18(d) indicate a significant increase in the risk of induced seismicity above the local magnitude threshold, Section 1.18(e) authorizes the state regulatory agency to require the sequestration operator to mitigate the increased risk.

Guidance on Subchapter C: Sequestration estate and unitization.

Pore space ownership.

Pore space ownership is typically vested in the surface owner. The model statute recognizes pore space ownership is vested in the surface owner, following the American Rule of property ownership. Most states that have already addressed pore space ownership have recognized ownership by the surface owner. There have been instances where courts have assigned ownership to the mineral owner, following what has been called the English Rule of pore space ownership. The English rule considers that the pore space belongs to the mineral owner because they created it through extraction. In contrast, the American rule considers that the pore space exists separately from the minerals that are in the pore space and the mineral owner owns the minerals, but not the pore space in which minerals are present. Where pore space is present in the absence of minerals, the notion of creation is unwarranted.

States should consider the following issues when enacting pore space ownership provisions:

- Property owners may have previously completed pore space transactions, so states should consider how they will handle these issues when determining ownership of pore space, especially if they were completed by owners different than those the state is considering assigning pore space ownership. Several states have enacted provisions to preserve prior pore space transactions and apply the statute looking forward. The model statute takes this approach.

- Acquisition of pore space rights by sequestration operators may take different forms. This could include transferring by leasing, selling (conveyance by deed), inheritance/will, trust, right of way, or other method.

Conveyance of sequestration rights.

The model statute adopts the term “sequestration estate” to designate “[o]wnership of the right to use pore space in a reservoir for geologic sequestration of carbon dioxide.”

The model statute contemplates the ability to sever, convey, or transfer a sequestration estate separately from the surface and mineral estate. Severing and conveying the sequestration estate is a concept of treating the pore space like a mineral estate as a separate property interest that can be owned and transferred independently from the surface or mineral estate. The model statute includes language that allows the surface owner to sever the sequestration estate from the surface estate or to transfer the sequestration estate in the same manner that mineral estates are severed and transferred.

The model statute allows any transfer that occurred prior to enactment of the statute to remain in place and unaltered by the enactment of the statute. The model statute also states that any conveyance of the ownership of the overlying surface estate is a conveyance of the sequestration estate, unless the conveyance instrument expressly reserves the sequestration estate or the sequestration estate was previously severed, either by reservation or conveyance, from the ownership of the surface estate.

Severing the sequestration estate from the surface estate means that the surface owner could create a split estate between the surface and the sequestration estate, in a similar manner to a surface and mineral split estate scenario. In a split estate scenario, the model statute includes language that the sequestration estate owner has no right to use the surface estate, unless that right is explicitly granted in the property conveyance documents or otherwise granted by the surface estate owner. This language eliminates dominance issues between the sequestration estate and the surface estate~~s~~ but allows granting of access and use rights in conveyance documents or by negotiation of an agreement between both owners.

The model statute indicates that nothing therein modifies the dominance of the mineral estate over the surface and sequestration estates. This retains all abilities of the mineral owner to access their property that they may have had prior to the adoption of these model statutes, even if they are not the owner of the surface or sequestration estates.

Unitization.

To facilitate the operation of a sequestration facility, the model statute includes a section on unitization of the reservoir. Unitization may be necessary in the event rights to 100 percent of the necessary sequestration estates are not owned by the sequestration operator or if full voluntary participation of sequestration estate owners cannot be obtained.

The requirements for an application for unitization are included in the statute, but states may add or remove additional requirements as deemed necessary. A state should find that the terms of unitization are just and reasonable, so the requirements of the application should include the necessary information to make this finding.

The term “corresponding rights” is introduced in the unitization section. This term may be considered comparable to correlative rights as it is known in the oil and gas industry and the definition is included in the definition section of the model statutes. The objective is to provide protections to nearby owners of subsurface rights without fully incorporating all the jurisprudence surrounding correlative rights.

The model statute includes a requirement to acquire approval of the owners of at least 60 percent of the sequestration estate acreage before the unitization order becomes effective. The use of the term acreage defines the unit as two dimensional rather than considering three dimensional volumes within the unit. This is typical of the approach taken by most states that have addressed this issue. States should consider if this percentage is appropriate in their state and adjust accordingly.

States may consider the necessity to require or allow simplified unitization processes for projects with rights to 100 percent of the pore space. Creating units can provide legal and regulatory clarity in establishing the portion of the sequestration estate dedicated to an existing project. This can provide additional protections for corresponding rights and established projects when new developments are proposed adjacent to an existing project.

The unitization provisions will require determination of the reservoir or portion thereof to be unitized. The unit area is to be the size and shape reasonably required for the geologic sequestration of carbon dioxide. Initially, the application for unitization will provide the proposed unit and the vertical and horizontal limits to be included therein with a map or plat of the unit reservoir. The definition of the unit is also tied to the site characterization and modeling conducted to obtain the sequestration project UIC Class VI injection well permits. Once defined, the unit area must be recorded in the land records for each county in the unit area.

The model statute includes the ability to terminate a unit in the event the sequestration never occurs or for other reasons that may arise. There are also provisions to add to or otherwise modify the unit as necessary if future data shows changes to the unit shape or size are necessary. Approval by the owners of at least 60 percent of the pore space is required to make these types of modifications to the unit size or shape.

Guidance on Subchapter D: Eminent domain and pipelines.

The model statute specifically addresses the utilization of eminent domain authority with respect to carbon dioxide pipelines and preemption of the authority of political subdivisions except as expressly authorized pursuant to state law. The model statute also addresses the obligation to repair and restore agricultural land disturbed by construction of a carbon dioxide pipeline pursuant to eminent domain authority or by related survey work.

In a report released on December 31, 2010, the IOGCC, in partnership with the Southern States Energy Board and the National Energy Technology Lab, issued a report entitled “A Policy, Legal and Regulatory Evaluation of the Feasibility of a National Pipeline Infrastructure for the Transport and Storage of Carbon Dioxide.” An integral part of that report was an assessment of existing state authorities to address eminent domain in the context of carbon dioxide pipelines. Appendix II of that report noted that at the time of the release of that report the only states that were known to have eminent domain rights to seize private property for carbon dioxide pipeline development in exchange for payment of fair market value were the states of California, Colorado, Louisiana, and Mississippi. If carbon dioxide pipelines qualified as common carriers they were also addressed in Montana, North Dakota and Texas.

In December 2023, the IOGCC initiated a survey of members to determine whether states authorize the right to use eminent domain or any other expropriation authority in connection with carbon dioxide pipelines. Based upon the responses to that survey and subsequent contact with states by Committee members, the Committee has identified the following states that have or are considering authority to authorize eminent domain with respect to carbon dioxide pipelines.

- Alabama
- Alaska
- Iowa
- Indiana
- Louisiana
- Michigan
- Minnesota
- Montana
- North Dakota
- South Dakota
- Texas
- Wyoming

Summaries of the responses offered with respect to this survey appear in Attachment C.

Other guidance.

Subsurface pressure issues.

Subsurface pressure increases are dynamic and complex phenomena that are likely to be associated with the injection of carbon dioxide during geologic sequestration operations. The likely presence of such increases is widely recognized in scientific literature. The area of increased pressure will migrate over time in response to the injection of carbon dioxide and the pressures used to conduct such operations. It is almost certain that the increased pressure from geologic sequestration operations will occur outside of the area that is intended to contain the injected carbon dioxide. While the scientific and legal implications of this phenomenon remain under review and best practices are not yet established, policymakers should watch developments in the following two contexts:

- Interference between subsurface injection projects, e.g., where each project's Area of Review (AoR) might not include an offset fluid conduit, the additional pressure impact from an adjacent operation could cause carbon dioxide or formation fluid to reach that fluid conduit. In these circumstances, policymakers might consider an expanded multi-well or multi-project AoR that takes additional pressure effects into account.

- Property right implications, e.g. where offset pore space economic usability is impacted by a nearby geologic sequestration project via pressure increases rather than carbon dioxide migration.

Regulatory capacity.

Establishing and running a geologic sequestration regulatory program is a major undertaking for any state agency. Lawmakers should work with regulators to ensure the following:

- Programs are sufficiently, predictably, and consistently funded to cover startup and operational costs;

- Programs have enough staff to cover the expected level of activity in the state; the skill sets required for regulating geologic sequestration are represented among staff or contracted consultants; and staff receive ongoing training in their relevant technical disciplines; and

- Programs are supported by modern risk-based data management systems to allow for efficient coordination between and among relevant state agencies and project proponents and to facilitate transparency and trust for the public.

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Attachment A
Memorandum of Understanding Between the [State] and the Federal Bureau of Land Management

1. Parties.

This Memorandum of Understanding (hereinafter referred to as "MOU") is made and entered into by and between the **[State]** and the Bureau of Land Management (BLM), whose address is _____.

2. Purpose.

The purpose of this MOU is:

(a) To designate the BLM as a Cooperating Agency in Geologic Sequestration Projects that are located on public lands or pore space managed by the BLM.

(b) To establish the responsibilities that pertain to the **[State]** and the BLM for cooperation and coordination for geologic sequestration projects that are located on public land managed by the BLM.

(c) To recognize that the **[State]** is the lead agency with responsibility for the completion and permitting activities associated with Geologic Sequestration UIC Class VI wells.

(d) To recognize that the **[State]** is the lead agency with authority for unitization activities associated with the Geologic Sequestration UIC Class VI wells.

(e) To recognize that the BLM will work with the **[State**] on unitization activities associated with the Geologic Sequestration UIC Class VI wells when federal pore space is included in the proposed unit.

(f) To recognize that the BLM is the lead agency with authorization to grant a right-of-way for activities associated with Geologic Sequestration UIC Class VI wells on public land or pore space managed by the BLM.

(g) To describe the respective responsibilities, jurisdictional authority, and expertise of each of the Parties in the planning process.

3. Term of MOU.

This MOU shall commence upon the day and date last signed and executed by the duly authorized representatives of the parties to this MOU and shall remain in full force and effect until terminated. This MOU may be terminated, by either party upon ninety (90) days written notice to the other parties, providing that they consult during this period to seek agreement on amendments or other actions that would avoid termination. This MOU will be reviewed every five (5) years to determine applicability and whether a revision or amendment is necessary.

4. Authorities for the MOU.

(a) The authorities of the BLM to enter into and engage in the activities described within this MOU include, but are not limited to:

(1) Federal Land Policy and Management Act of 1976 (43 (U.S.C 1701 et seq.).

(2) National Environmental Policy Act of 1969 (NEPA) (42 U.S.C 4321 et seq.).

(3) The Mineral Leasing Act of 1920 (30 U.S.C § 181 et seq.)

(b) Regulations implementing the above authorities:

(1) Council on Environmental Quality regulations (40 CFR parts 1500 through 1508).

(2) Bureau of Land Management planning regulations (43 CFR Part 1600).

(3) Department of the Interior NEPA regulations (43 CFR Part 46).

(c) The authorities of the **[State]** to enter into this MOU include but are not limited to: _____.

5. Procedures.

The BLM and the **[State]** agree to:

(a) Develop or acquire and share information of common needs.

(b) Plan and implement carbon capture sequestration development in coordination with surface management issues.

(c) Maintain a good faith effort to keep one another informed and advised, as far in advance as possible, of proposed plans or actions which might affect the other. All decisions should consider applicable state or local regulatory requirements.

(d) Work in harmony to achieve the objectives of their policies and regulations. To the extent possible, all actions throughout this MOU will utilize existing systems and procedures.

(e) The **[Location]** BLM Office will be the primary point of contact for routine disbursement of correspondence related to this MOU. All correspondence, dockets, notices, and decisions will be sent to the [**Location**] BLM Office for proper distribution. It will be the BLM State Office responsibility for oversight and policy decisions regarding the rights-of-way (ROWs) to use public lands for geologic sequestration of carbon dioxide. The specific contact for the BLM is listed in Appendix A of this MOU.

(f) The **[State]** Office will be the primary point of contact for routine disbursement of correspondence related to this MOU. All correspondence, dockets, notices and decisions will be sent to the [**State**] office for proper distribution. The specific contact for the [**State**] is listed in Appendix A of this MOU.

6. Roles and Responsibilities of the Parties.

(a) **[State]** Responsibilities:

(1) The **[State]** will inform the [**appropriate agencies**] when a unitization application is made for a UIC Class VI well.

(2) The **[State]** will inform the BLM when a UIC Class VI well application is made.

(3) The **[State]** will request information to verify if the project is located on federally owned land or not.

(4) The **[State]** will request information on wells associated with federal mineral interests that are active in the UIC Class VI well application Area of Review (AoR). In addition, the **[State]** will request information on all wells that have been plugged and abandoned in the AoR.

(5) The **[State]** shall establish the bond amount on public lands required by 43 CFR 2805.20 and **[State Statute, if applicable].** The bond will be redeemable by both the Secretary of the Interior and the State. The BLM shall review for bond adequacy and respond to the **[State]** with concurrence or recommendations for modification. The BLM's bonding authority is restricted to only the public lands portion of the permit area where plans of operations or notices have been approved.

(6) The **[State]** shall hold all bonds associated with the UIC Class VI well (i.e., the injection well, monitoring well(s), well pad(s), and infrastructure associated with the Class VI

permit) until the Class VI owner/operator requests release of financial assurance following the requirements outlined in [**State Rule or Statute**]. The [**State]** will notify the BLM that a release of financial assurance has been requested. If the **[State]** determines the conditions for site closure have been met, they will notify the BLM of their findings and the BLM will give concurrence or recommendations for modifications.

(7) The **[State]** understands that the BLM does not allow for irrevocable trust funds with government-backed securities as a financial instrument. The **[State]** agrees to convey this information to a UIC Class VI owner or operator for any Class VI activities associated with federal pore space.

(8) The BLM and the [State] agree that the operator shall be responsible for providing UIC Class VI bond estimates annually. Both the BLM and the [State] shall review for bond adequacy. The BLM will respond to the [State] within forty-five (45) days of receipt of the bonding information and give concurrence or recommendations for modifications.

(9) In the event of bond forfeiture, the [**State**] will administer the reclamation contract; therefore, public land administrative fees (43 CFR 3809.554) would not apply.

(10) The **[State]** will notify the BLM of UIC Class VI permit transfer applicants upon receipt of a transfer application. Proposed permit transferee shall apply in writing as though that person were the original applicant for the permit.

(11) The **[State]** will work with the BLM upon discovery of changes to the Area of Review that may result in trespass issues of federal pore space or adverse impacts to federal minerals.

(b) BLM Responsibilities:

(1) The BLM will inform the **[State]** when a ROW application is made for a UIC Class VI well.

(2) The BLM will inform the **[State]** of any other BLM-approved activities in the project area that may affect the UIC Class VI permitting process.

(3) The BLM will provide information as to the location and presence of any federal minerals in the AoR in addition to any valid mineral leases in the AoR.

(4) The BLM will assist the **[State]** in determining financial amounts sufficient to cover surface reclamation needs.

(5) The BLM will provide the **[State]** with written estimates for the cost of reclaiming the surface for any geologic sequestration infrastructure located on federal lands.

(6) If remediation of an oil and gas well is necessary for an existing, plugged and abandoned wellbore permitted currently or previously by the BLM, the UIC Class VI permit applicant shall come to an agreement with the BLM regarding any existing, plugged and abandoned wellbore permitted currently or previously by the BLM in relation to any federal mineral lease.

(7) The BLM will inform the **[State]** of ROW reassignments for a UIC Class VI project.

(8) Until new regulations or BLM policy are developed, the BLM's pore space ROW grant will not provide for the exclusive use of the pore space by the ROW grant holder. Under this approach, the BLM could offer and issue multiple pore space ROWs for the same area and formation(s). Actual injection operations to the pore space would not be allowed by the BLM until a notice to proceed has been issued by the BLM, which will be contingent upon the ROW grant holder securing necessary UIC Class VI permit authorizations. The BLM will not issue a notice to proceed until such a time that the **[State]** has issued an Authorization to Inject for that project.

(c) Responsibilities of the Parties:

(1) The Parties agree to participate in all planning and NEPA processes in good faith and make all reasonable efforts to resolve disagreements. Where procedural or substantive disagreement may impede the effective and timely completion of a resource management plan (RMP) or NEPA analysis, the Parties agree to utilize the facilitation and conciliation procedures described below (see Section 7(e)).

(2) The Parties agree to comply with the schedule developed for each planning and/or NEPA analysis, including dates for RMP/environmental impact statement (EIS) milestones and timeframes for Cooperator's reviews and submissions. Timeframes for reviews will be developed consistent with applicable BLM Instruction Memoranda.

(3) Each Party agrees to fund its own expenses associated with the planning and/or NEPA process, except that the BLM may contract with the Cooperator for technical studies within its jurisdiction by law or special expertise. Should this occur, the terms of the contract may be captured in an amendment to this MOU as provided for in Section X.

(4) The Parties agree to carefully consider whether proposed meetings or other activities would waive the Unfunded Mandates Reform Act exception to the Federal Advisory Committee Act (2 U.S.C. 1534(b) and 5 U.S.C. App.).

(5) Any additional provisions regarding the responsibilities of either or both parties to the planning and/or NEPA process being developed for a specific project shall be incorporated into an amendment to this MOU as provided for in Section 7(a).

7. General Provisions.

(a) **Amendments.** Either party may request changes in this MOU. Any changes, modifications, revisions, or amendments to this MOU that are mutually agreed upon by and between the parties to this MOU shall be incorporated by written instrument, executed and signed by all parties to this MOU.

(b) **Applicable Law.** The construction, interpretation, and enforcement of this MOU shall be governed by the laws of the State of _____. The courts of the State of _____shall have jurisdiction over any action arising out of this MOU and over the parties, and the venue shall be the _____.

(c) **Authorities Not Altered.** Nothing in this MOU alters, limits, or supersedes the authorities and responsibilities of any Party on any matter within their respective jurisdictions. Nothing in this MOU shall require any of the Parties to perform beyond its respective authority.

(d) **Conflict of Interest.** The Parties agree not to utilize any individual or organization for purposes of plan development, environmental analysis, or Party representation, including officials, employees, or third-party contractors, having a financial interest in the outcome of the planning and/or geologic sequestration UIC Class VI process. Questions regarding potential conflicts of interest should be referred to the BLM State Office or Field Ethics Counselors for resolution.

(e) **Conflict Resolution.** The Parties agree to make reasonable efforts to resolve procedural or substantive conflicts and may agree to initiate an Alternative Dispute Resolution process. The Parties acknowledge that the **[State]** retains final responsibility for the decisions identified in the UIC Class VI Permit and retains final responsibility for the decisions identified in the Unitization Orders; and that the BLM retains final responsibility for the decision identified in the ROW grant.

(1) If the Parties deem it necessary, they agree to retain an independent facilitator to foster clear and efficient communication. The facilitator's responsibilities will be identified for the specific planning and/or geologic sequestration process being undertaken. Procedures for retaining, directing, and compensating the facilitator, and a more detailed list of duties, will be determined on a case-by-case basis.

(2) Conflict resolution will be initiated between the **[State]** and the BLM at the level of the Authorizing Officer for the planning and/or geologic sequestration process in question.

(f) **Coordination with Contractors.** Parties may retain the services of third-party contractors to assist with public involvement, data collection, environmental analysis, and planning or sequestration-related document preparation. Unless otherwise specified in a project-specific MOU amendment, a Party will communicate with the other Party's contractor only through the other Party's representative. The Parties acknowledge that each party retains the exclusive responsibility to authorize modifications to its own third-party contract and that the other party is not authorized to provide technical or policy direction regarding the performance of the contract.

(g) **Documenting Disagreement or Inconsistency.** Where the Parties disagree on substantive elements of the planning and/or geologic sequestration process (such as the designation of the alternatives to be analyzed or analysis of effects), and these disagreements cannot be resolved consistent with 40 CFR 1503.3, the Parties will include a summary of the commenting party's views in any draft or final documents. The Parties will also describe substantial inconsistencies between their proposed action(s) and the objectives of state, local, or tribal land use plans and policies consistent with 43 CFR 1610.

(h) **Entirety of Agreement.** This MOU, consisting of **[number spelled out]** (**numeral**) pages, represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

(i) **Financial Obligations.** Nothing in this MOU shall require any of the Parties to assume any obligation or expend any sum in excess of authorization and appropriations available.

(j) **Management of Information.** The Parties acknowledge that all supporting materials and draft documents may become part of the administrative record and may be subject to the requirements of the Freedom of Information Act (FOIA), other federal statutes, and the **[applicable state public records statutes]**. Insofar as it does not violate any public records requirements, the Parties agree to commit to maintaining the confidentiality of documents and deliberations during the period prior to the public release of any documents including drafts. Public records in _____are governed by _____.

(k) **Prior Approval.** This MOU shall not be binding upon any party unless this MOU has been reduced to writing before performance begins as described under the terms of this MOU and unless this MOU is approved as to form by the Attorney General or his/her representative.

(l) **Severability.** Should any portion of this MOU be judicially determined to be illegal or unenforceable, the remainder of the MOU shall continue in full force and effect, and any party may renegotiate the terms affected by the severance.

(m) **Sovereign Immunity.** The **[State]** and the BLM do not waive their sovereign immunity by entering into this MOU. Each fully retains all immunities and defenses provided by law regarding any action based on or occurring as a result of this MOU.

(n) **Third-Party Beneficiary Rights.** The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this MOU shall not be construed so as to create such status. The rights, duties, and obligations contained in this MOU shall operate only between the parties to this MOU and shall inure solely to the benefit of the parties to this

MOU. The provisions of this MOU are intended only to assist the parties in determining and performing their obligations under this MOU. The parties to this MOU intend and expressly agree that only the parties' signatory to this MOU shall have any legal or equitable right to seek to enforce this MOU, to seek any remedy arising out of a party's performance or failure to perform any term or condition of this MOU, or to bring an action for the breach of this MOU.

8. Agency Representatives.

Each Party will designate a representative and alternative representative, upon initiation of a planning and/or geologic sequestration analysis, to ensure coordination between the **[State]** and the BLM during the process. Each Party may change its representative at will by providing written notice to the other Party. The representative shall serve as the Authorizing Officer as identified in Section 7(e)(2) above.

9. Signatures.

In witness whereof, the parties to this MOU through their duly authorized representatives have executed this MOU on the days and dates set below, and certify that they have read, understood, and agreed to the terms and conditions of this MOU as set forth herein. The effective date of this MOU is the date of the signature last affixed to this page.

[State]

Signature _____

Printed Name and Title _____

Date _____

Bureau of Land Management

Signature _____

Printed Name and Title _____

Date _____

Attorney General's Office Approval as to Form

Signature _____

Printed Name and Title _____

Date _____

Agency Represented _____

Attachment B
Memorandum of Understanding Between [Permitting State] and [Border State] Related to Geologic Sequestration Projects

1. Parties.

This Memorandum of Understanding (hereinafter referred to as "MOU") is made and entered into by and between the states of **[Permitting State]** and **[Border State**].

2. Purpose.

The purpose of this MOU is:

(a) To establish the responsibilities that pertain to the **[Permitting State]** and the [**Border State]** for cooperation and coordination for geologic sequestration projects.

(b) To recognize that the **[Permitting State]** is the lead agency with responsibility for the completion and permitting activities associated with Geologic Sequestration UIC Class VI wells and for unitization activities associated with such wells in that state.

(c) To recognize that the [**Border State]** is the lead agency with respect to all matters located in that state that are related to a geologic sequestration project initiated in the **[Permitting State]**.

(d) To describe the respective responsibilities, jurisdictional authority, and expertise of each of the Parties in the planning process related to geologic sequestration projects that have the potential to cross borders and to promote information sharing and transparency with respect to such projects.

3. Term of MOU.

This MOU shall commence upon the day and date last signed and executed by the duly authorized representatives of the parties to this MOU and shall remain in full force and effect until terminated. This MOU may be terminated, by either party upon ninety (90) days written notice to the other parties, providing that they consult during this period to seek agreement on amendments or other actions that would avoid termination. This MOU will be reviewed every five (5) years to determine applicability and whether a revision or amendment is necessary.

4. Authorities for the MOU.

(a) The authorities of the **[Permitting State]** to enter into and engage in the activities described within this MOU include but are not limited to: _____.

(b) The authorities of the **[Border State]** to enter into and engage in the activities described within this MOU include but are not limited to: _____.

5. Roles and Responsibilities of the Parties.

(a) **[Permitting State]** Responsibilities:

(1) Inform the **[Border State]** and related tribes as early as possible when a UIC Class VI well application is made which has an Area of Review (AoR) that is predicted to cross related jurisdictional boundaries.

(2) Request information from the **[Border State]** and related tribes and territories on wells that are active in the UIC Class VI well application AoR. In addition, request information on all wells that have been plugged and abandoned in the AoR.

(3) Afford the **[Border State]** and any related tribes and territories the opportunity to be involved in relevant permitting activities or the approval of plans and supplemental reports related to the Class VI injection well permit application review and subsequent implementation.

(4) Share at least the location of the proposed UIC Class VI well (specifically, the latitude and longitude, if known; township, section, and range; county; and State) and the name of the applicant with attendant contact information and State or Tribal contact information provided by the applicant [40 CFR 146.2(b)].

(5) Provide detailed information on the proposed project site and the plans for the project, along with notification of any public hearings scheduled on the proposed Class VI injection well pursuant to requirements at 40 CFR 124.

(6) Advise the **[Border State]** and related tribes and any other agency identified in the permit application of any Class VI injection well permit modifications and related pore space.

(7) Establish procedures for enhanced community engagement and for notifying the **[Border State]** and any tribes of UIC Class VI permit applications where the AoR is predicted to cross jurisdictional boundaries, as well as the procedures for documenting these consultations [40 CFR 145.23(f)(13)].

(8) Coordinate with co-regulators of other injection well classes, public drinking water utilities, and other federal, state, tribal, or local authorities as necessary during the various stages of a geologic sequestration project.

(9) In addition to alerting the appropriate USEPA regional office, if the owner or operator applies to expand the areal extent of an existing aquifer exemption, the **[Permitting State]** should also alert the **[Border State]** and any tribes of the opportunity to discuss and/or respond to the aquifer exemption application.

(b) **[Border State]** Responsibilities:

(1) Inform the **[Permitting State]** when a right-of-way (ROW) application is made for a UIC Class VI well.

(2) Provide information as to the location and presence of a mineral lease in the AoR.

(3) Assist the **[Permitting State]** in determining financial amounts sufficient to cover surface reclamation needs as well as to plug and abandon a UIC Class VI well after it is no longer needed.

(4) Provide the **[Permitting State]** with written estimates for the cost of reclaiming the surface and for plugging and abandoning a UIC Class VI well in the **[Border State].**

(5) Advise the **[Permitting State]** of the identification of tribes, other well classifications, and drinking water utilities that should be consulted in connection with a geologic sequestration project that crosses jurisdictional boundaries.

6. General Provisions.

(a) **Amendments.** Either party may request changes in this MOU. Any changes, modifications, revisions, or amendments to this MOU that are mutually agreed upon by and between the parties to this MOU shall be incorporated by written instrument, executed and signed by all parties to this MOU.

(b) **Applicable Law.** The construction, interpretation, and enforcement of this MOU shall be governed by the laws of the State of _____. The courts of the State of _____ shall

have jurisdiction over any action arising out of this MOU and over the parties, and the venue shall be the _____.

(c) **Authorities Not Altered.** Nothing in this MOU alters, limits, or supersedes the authorities and responsibilities of any Party on any matter within their respective jurisdictions. Nothing in this MOU shall require any of the Parties to perform beyond its respective authority.

(d) **Conflict of Interest.** The Parties agree not to utilize any individual or organization for purposes of plan development, environmental analysis, or Party representation, including officials, employees, or third-party contractors, having a financial interest in the outcome of the planning and/or geologic sequestration UIC Class VI process. Questions regarding potential conflicts of interest should be referred to the BLM State Office or Field Ethics Counselors for resolution.

(e) **Conflict Resolution.** The Parties agree to make reasonable efforts to resolve procedural or substantive conflicts and may agree to initiate an Alternative Dispute Resolution process. The Parties acknowledge that the **[Permitting State]** retains final responsibility for the decisions identified in the UIC Class VI Permit and retains final responsibility for the decisions identified in the Unitization Orders; and that the **[Border State]** retains final responsibility for all matters located in that state.

(1) If the Parties deem it necessary, they agree to retain an independent facilitator to foster clear and efficient communication. The facilitator's responsibilities will be identified for the specific planning and/or geologic sequestration process being undertaken. Procedures for retaining, directing, and compensating the facilitator, and a more detailed list of duties, will be determined on a case-by-case basis.

(2) Conflict resolution will be initiated between the **[Permitting State]** and the **[Border State]** at the level of the Authorizing Officer for the planning and/or geologic sequestration process in question.

(f) **Coordination with Contractors.** Parties may retain the services of third-party contractors to assist with: public involvement, data collection, environmental analysis, and planning or geologic sequestration-related document preparation. Unless otherwise specified in a project-specific MOU amendment, a Party will communicate with the other Party's contractor only through the other Party's representative. The Parties acknowledge that each party retains the exclusive responsibility to authorize modifications to its own third-party contract and that the other Party is not authorized to provide technical or policy direction regarding the performance of the contract.

(g) **Documenting Disagreement or Inconsistency.** Where the Parties disagree on substantive elements of the planning and/or geologic sequestration process (such as the designation of the alternatives to be analyzed or analysis of effects), and these disagreements cannot be resolved, the Parties will include a summary of the commenting party's views in any draft or final documents. The Parties will also describe substantial inconsistencies between their proposed action(s) and the objectives of state, local, or tribal land use plans and policies.

(h) **Entirety of Agreement.** This MOU, consisting of **[X]** (**X**) pages, represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

(i) **Financial Obligations.** Nothing in this MOU shall require any of the Parties to assume any obligation or expend any sum in excess of authorization and appropriations available.

(j) **Management of Information.** The Parties acknowledge that all supporting materials and draft documents may become part of the administrative record and may be subject to the

requirements of the **[applicable state public records statutes].** Insofar as it does not violate any public records requirements, the Parties agree to commit to maintaining the confidentiality of documents and deliberations during the period prior to the public release of any documents including drafts.

(k) **Prior Approval.** This MOU shall not be binding upon any party unless this MOU has been reduced to writing before performance begins as described under the terms of this MOU and unless this MOU is approved as to form by the Attorney General or his/her representative.

(l) **Severability.** Should any portion of this MOU be judicially determined to be illegal or unenforceable, the remainder of the MOU shall continue in full force and effect, and any party may renegotiate the terms affected by the severance.

(m) **Sovereign Immunity.** The **[Permitting State]** and the **[Border State]** do not waive their sovereign immunity by entering into this MOU. Each fully retains all immunities and defenses provided by law regarding any action based on or occurring as a result of this MOU.

(n) **Third-Party Beneficiary Rights.** The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this MOU shall not be construed so as to create such status. The rights, duties, and obligations contained in this MOU shall operate only between the parties to this MOU and shall inure solely to the benefit of the parties to this MOU. The provisions of this MOU are intended only to assist the parties in determining and performing their obligations under this MOU. The parties to this MOU intend and expressly agree that only the parties' signatory to this MOU shall have any legal or equitable right to seek to enforce this MOU, to seek any remedy arising out of a party's performance or failure to perform any term or condition of this MOU, or to bring an action for the breach of this MOU.

7. Agency Representatives.

Each Party will designate a representative and alternative representative, upon initiation of a planning and/or geologic sequestration analysis, to ensure coordination between the **[Permitting State]** and the **[Border State]** during the process. Each Party may change its representative at will by providing written notice to the other Party. The representative shall serve as the Authorizing Officer as identified in Section 6(e)(2) above.

8. Signatures.

In witness whereof, the parties to this MOU through their duly authorized representatives have executed this MOU on the days and dates set below, and certify that they have read,

understood, and agreed to the terms and conditions of this MOU as set forth herein. The effective date of this MOU is the date of the signature last affixed to this page.

[Permitting State]

Signature _____

Printed Name and Title _____

Date _____

[Border State]

Signature _____

Printed Name and Title _____

Date _____

Attorney General's Office Approval as to Form

Signature _____

Printed Name and Title _____

Date _____

Agency Represented _____

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Attachment C
Eminent Domain Survey Responses

Alabama

Eminent domain authority for carbon dioxide pipelines?
Yes

Statute, rule, or judicial authority.
General Eminent Domain Authority
The Alabama legislature has granted eminent domain rights to corporations formed for constructing, operating, or maintaining infrastructure such as railroads, utilities, pipelines, and other public utilities.
Citations: Ala. Code § 10A-21-2.01; § 10A-21-2.04; § 10A-21-2.05; § 37-4-130.

Underground Gas Storage (Article 6)
Definitions (Ala. Code § 9-17-150): Includes terms such as gas, storage facility, storage operator, underground reservoir, and underground storage.
Eminent Domain Authority (Ala. Code § 9-17-154): Storage operators, upon approval by the State Oil and Gas Board, may exercise eminent domain to acquire necessary surface and subsurface rights for gas storage facilities. This includes rights-of-way for pipelines and acquisition of hydrocarbons. Restrictions apply to salt dome storage, requiring written consent from 75% of interest holders and lessees within a 1500-foot radius.

The Alabama Oil and Gas Board regulations are available online.
Proposed Rule (March 2024): The Board is considering adoption of Proposed Rule 400-8, governing the geologic storage of carbon dioxide, including requirements for CO_2 gathering lines.

Alaska

Eminent domain authority for carbon dioxide pipelines?
No.

Statute, rule, or judicial authority.
Statute: AS 38.35 – Right-of-Way Leasing Act (https://www.akleg.gov/basis/statutes.asp)
Regulations: 11 AAC 80 (https://www.akleg.gov/basis/aac.asp)

Right-of-Way Leasing Act Amendment: Proposed language would include CO_2 as an allowable product in common carrier petroleum pipelines.

HB 50 (Pending, 2024): Would authorize the Commissioner to lease land for CO_2 pipeline rights-of-way.

Alaska is in the process of establishing its Carbon Capture, Utilization, and Storage (CCUS) regulatory framework, which will include provisions for CO_2 pipelines.

Indiana

Eminent domain authority for carbon dioxide pipelines?
No.

Statute, Rule, or Judicial Authority.
C14-39: Eminent Domain for Pipeline Transportation or Underground Storage of Carbon Dioxide. This chapter establishes the legal framework for the use of eminent domain in relation to carbon dioxide (CO_2) pipeline transportation and underground storage in Indiana.

IC 4-21.5-3.5-4
IC 4-21.5-3.5-13
IC 4-21.5-3.5-16 through IC 4-21.5-3.5-19
IC 4-21.5-3.5-20(b) and IC 4-21.5-3.5-20(c)
IC 4-21.5-3.5-23
IC 4-21.5-3.5-24
IC 4-21.5-3.5-26
IC 4-21.5-3.5-27

Specific points about the statute:
(1) 14-39-1-3.5(a)(1)(D)
Class VI permit must be issued by USEPA.
(2) 14-39-1-4(A)(4)(C)
At least one producer of CO2 must be located in Indiana.
The applicant must have at least one end user.
(3) 14-39-1-9(1)
Pay 125% for agricultural land.
Pay 150% for land occupied by owner as a residence.
(presume that all other land is paid at 100% of fair market value)

The following apply to a mediation conducted under this subsection:
IC 4-21.5-3.5-4
IC 4-21.5-3.5-13
IC 4-21.5-3.5-16 through IC 4-21.5-3.5-19
IC 4-21.5-3.5-20(b) and IC 4-21.5-3.5-20(c)
IC 4-21.5-3.5-23
IC 4-21.5-3.5-24
IC 4-21.5-3.5-26
IC 4-21.5-3.5-27

No rules yet; rules are currently under development for pipelines and sequestration.

A pending bill to give a county the right to approve the sequestration of CO2 from another county.

Iowa

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, and judicial authority.
Constitutional Provision:
Article I, Section 18 – Eminent Domain

Controlling Chapters:
Chapter 6A – Eminent Domain Law
This entire chapter (page 185 of the pdf) lays out the state power, rights, conferred, and limitations. i.e., substantive rules.

Chapter 6B – Procedure under Eminent Domain (page 194 of the pdf above).
This chapter lays out the procedural requirements such as notices, timelines, challenges, review, commission duties, etc.

Relevant:
Chapter 479 – Pipelines and Underground Gas Storage

§ 479-.7 Hearing – notice requirement.

§ 479.24 – Eminent Domain: limits the grant of the power to the extent necessary and prescribed by the board and states those specifications, see sample language below:

- Surface operations limits: 75 feet width for right-of-way and not exceeding 1 acre in any one location in addition to right-of-way for the location of pumps, pressure apparatus, or other stations, or equipment.
- *Mid-America Pipeline Company v. Iowa State Commerce Commission, 253 Iowa 1143* (1962): this section is not to be interpreted as granting of eminent domain power for private use only.

Chapter 479B – Hazardous Liquid Pipelines and Storage Facilities

§ 479B.16 Eminent domain

Other narrow provisions that could be relevant:
§614.1-11-a-1: Statute of Limitations of 15 years on an interstate pipeline licensed by the federal energy regulatory commission for actions arising out of the unsafe or defective condition of an improvement of real property based on tort, implied warranty, contribution, indemnity, and injury to property or wrongful death.

Chapter 478 Electric Transmission Lines

§ 478.6. Taking under Eminent Domain – provides administrative procedure for the utilities board.

No cases challenging eminent domain authority in the context of CO2 pipelines but the following case could be persuasive:

Puntenney v. Iowa Utils. Bd., 928 N.W.2d 829 | Supreme Court of Iowa | May 31, 2019:

In *Puntenney v. Iowa Utils. Bd.*, the Iowa Supreme Court held that an oil pipeline company could exercise eminent domain to condemn farmland in Iowa, because it was considered a utility and common carrier under Iowa law. The court found public use and benefit even though the pipeline passed through Iowa without delivering oil there.
Legal framework: The court conducts a review of administrative agency decision making, provides deference, and conducts statute interpretation to determine authority and meaning of "public convenience and necessary" (reasonably necessary).

Last Session:

House File 565 – Passed the House but killed in Senate last session.

Assigned to a subcommittee.
Bill relating to specified utility construction project requirements.

- Broadens liability for claims for crop yield loss damages. which can be renegotiated under § 6B.54:
  - Irrelevant that claims arose from damages that were apparent at the time of settlement or more than 5 years after the settlement date.
- Allows landowners to file a complaint with the county board of supervisors seeking imposition of civil penalties.
- Section 6: adds damage to soil, water conservation structures, irrigation, or drainage systems to the list of compensable losses. i.e., liability for pipeline companies.
  - Clarifies "landowner" definition to include a farm tenant.
  - Clarifies that a landowner may file an action against a pipeline company in small claims or district court for a violation of this section or purpose remedies under § 479B.30-7.

Broadens "damages" definition to include compensable losses.

House File 311 – introduced but no action.

Requires pipeline companies to acquire approval from 90% of landowners.

Senate File 104 – achieves the same goal and similarly, no actions taken.

House File 308 – no actions taken.

Repeals authority of the IUB to grant eminent domain powers.
HF 342 and SF 101– duplicate bills.

2024 session:

House File 2664 – passed the house and pending Senate approval.

The bill allows landowners who are subject to eminent domain requests by carbon dioxide pipeline companies to challenge the legitimacy of those requests in court earlier in the permit proceedings.
***The bill allows landowners to bypass the administrative procedure and seek judicial remedy via a declaratory judgement.

House File 2522 – achieves the same goal but was withdrawn as of March 28, 2024.
Additional source/context: Iowa House passes eminent domain bill for pipelines • Iowa Capital Dispatch

House File 2361 – introduced and assigned to the Judiciary Committee
grant the general assembly (3/5 majority needed) authority to withdraw from eminent domain proceedings initiated by the Iowa Utilities Board.

Louisiana

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
LA RS 30:4 provides eminent domain authority for EOR projects through Certificate of Public Convenience and Necessity in RS 30:1107.
LA RS 30:1104 provides DNR authority over CO_2 pipelines, including the issuance of a Certificate of Public Convenience and Necessity in RS 30:1107.
LAC 43:XI Subpart 4 Ch. 33-35.

Certificate of Transportation is used only for intrastate natural gas pipelines.
CO_2 pipeline operator receives an Order from Commissioner, providing the operator with expropriation rights.
Expropriation can only be approved by a judge.
Initial bill in 2009 that established expropriation authority was Act 517.
Additional amendments in 2019 (Act 297), 2020 (Act 61), 2021 (Act 326), 2022 (Act 163), and 2023 (Acts 150 and 378).
Common carrier lines in LA are lines carrying liquid hydrocarbons.
Contract carrier is rarely used.

Use of Eminent Domain for CO_2 may have been used by Denbury in 2006 and 2007 for the "green line" that traverses Louisiana, Mississippi, and Texas, serving EOR projects.
It may have been used on another CO_2 line south of Monroe, LA, beginning in Mississippi and ending in Delhi, Louisiana, serving the Delhi field EOR project.

Michigan

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
CO_2 pipelines in Michigan have eminent domain rights. Operators are required to repair agricultural land and topsoil disturbed during pipeline construction.

Act 16 of 1929, Section 483.2 (amended by Act 84 of 2014) grants eminent domain authority to entities transporting crude oil, petroleum, or carbon dioxide substances. The law allows such entities to condemn property and use highways to acquire necessary rights-of-way for pipeline construction and operation. Condemnation proceedings must follow the Uniform Condemnation Procedures Act (1980 PA 87, MCL 213.51 to 213.75).

No specific rules for CO_2 pipelines.

Minnesota

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
Minn. Const. art. I, § 13 Sec. 13. Private property shall not be taken, destroyed or damaged for public use without just compensation therefore, first paid or secured.
Chapter 117 – Eminent Domain
117.012. Preemption; public use or purpose
117.075 Hearing; Commissioners; Order For Taking: Takings go through the court which appoints persons to the commissioners' board to review the takings request and render a decision to be approved by the court. The commissioners' board includes three disinterested parties and at least two alternates, to ascertain and report the amount of damages that will occur from the taking. Further, the court may appoint an attorney knowledgeable in eminent domain matters.
117.085 Commissioners, Powers, Duties. The decision of the commissioners may be appealed within 60 days of their report. The statute lays out the appeal procedure, burden of proof, and other requirements.
Chapter 216B – Public Utilities - 216B.47 Acquisition By Eminent Domain. Ensures municipalities' power to acquire public utility power through eminent domain proceedings.
Chapter 216G – Pipelines The entire chapter provides the requirements for acquiring easement for pipelines. Below are a few provisions that may be beneficial to review.
216G-03 – Pipeline Proposal; Easement Acquisition.
216G.05 – Public Meetings Required
216G.06 – Interstate Gas Pipelines Exempt Under Federal Law.
216G.08 – Limitation of Liability CO2 pipeline eminent domain authority has not been challenged but City of Moorhead v. Red River Valley Co-op. Power Ass'n, 811 N.W.2d 151, 156 (Minn. Ct. App. 2012) provides guidance on how Chapter 117 and 216B work together. However, this case was not a challenge to the commissioners' nor the public utilities commission's authority, rather it was a challenge to the district court's evaluation of fair value. " Minnesota Public Utilities Act, Minn.Stat. §§ 216B.02–.82 (2010), regulates electric utilities in Minnesota.
Minn.Stat. § 216B.01 (2010). That act provides "two alternative statutory procedures by which an expanding municipality which owns and operates a utility may similarly expand or extend its

provision of utility services to annexed territory." City of Rochester v. People's Coop. Power Ass'n, 483 N.W.2d 477, 479 (Minn.1992).
The first option is to proceed under Minn.Stat. § 216B.44 to purchase electric-utility services, with the Minnesota Public Utilities Commission (MPUC) determining "the appropriate value of the property within the annexed area."
Minn.Stat. § 216B.44(b). To make that determination, the MPUC "shall consider the original cost of the property, less depreciation, loss of revenue to the utility formerly serving the area, expenses resulting from integration of facilities, and other appropriate factors." Id. The second option is to proceed using eminent-domain proceedings pursuant to Minn.Stat. § 216B.47. That statute provides, in relevant part: Nothing in this chapter may be construed to preclude a municipality from acquiring the property of a public utility by eminent domain proceedings; provided that damages to be paid in eminent domain proceedings must include the original cost of the property less depreciation, loss of revenue to the utility, expenses resulting from integration of facilities, and other appropriate factors. Id. Under this option, the same factors are considered by court-appointed commissioners, instead of the MPUC. Minn.Stat. § 216B.47; City of Rochester, 483 N.W.2d at 479.
The Minnesota Supreme Court has recognized that Minn.Stat. § 216B.44 and Minn.Stat. § 216B.47 set forth two separate procedures, and a municipality can choose which one to follow. City of Rochester, 483 N.W.2d at 479–81 (concluding that the doctrine of primary jurisdiction could not limit the municipality's right to choose between the two procedures)." City of Moorhead v. Red River Valley Co-op. Power Ass'n, 811 N.W.2d 151, 156 (Minn. Ct. App. 2012) City of Duluth v. State, 390 N.W.2d 757, 763 (Minn.,1986) provides the standard of review for a court to determine whether the "public use" requirement has been satisfied: "Great weight must be given to the determination of the condemning authority, and the scope of review is narrowly limited. If it appears that the record contains some evidence, however informal, that the taking serves a public purpose, there is nothing left for the courts to pass upon. Courts may interfere only when the Authority's actions are manifestly arbitrary or unreasonable. The acts of an authority vested with legislative determination in a particular area are manifestly arbitrary or unreasonable where they are taken capriciously, irrationally, and without basis in law or under conditions which do not authorize or permit the exercise of the asserted power. The court is precluded from substituting its own judgment for that of the Authority as to what may be necessary and proper to carry out the purpose of the plan." Pending or anticipated legislative action. Legislative Session 93 (2023-2024) S.F. No. 5060: introduced but not heard in the Senate or House yet. - A bill for prohibiting issuance of routing permits for pipelines that carry carbon dioxide.
S.F. No. 5048: introduced but not heard in the Senate or House yet. - A bill for facilitating carbon sequestration and oil and gas exploration and production leases on state-owned land. o Provides authority to various bodies for rulemaking purposes. o Created gas production technical advisory committee.
S.F. No. 3034: introduced but not heard in the Senate or House yet. - A bill for exempting electricity generated outside the state from the requirement that a certain proportion of retail electricity be carbon-free by certain dates. Creates an exemption for other states to avoid commerce clause challenges.
H.F. No. 2481 and H.F. No. 3105 are duplicate bills. H.F. No. 342: no actions yet. Introduced 1/17/2023.Establishes state policy supporting the development of carbon capture and sequestration technologies.

Montana

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
69-13-101. Common carrier pipeline – definition

Montana Code Annotated 2023
TITLE 70. PROPERTY
CHAPTER 30. EMINENT DOMAIN
Part 1. General and Substantive Provisions
Public Uses Enumerated
70-30-102. Public uses enumerated. Subject to the provisions of this chapter, the right of eminent domain may be exercised for the following public uses:
…(19) common carrier pipelines as provided in 69-13-104
…(41) underground reservoirs suitable for storage of natural gas

TransCanada has been granted eminent domain power to acquire private property for the construction of the Keystone XL Pipeline in Montana and South Dakota. However, there have been numerous legal challenges to TransCanada's use of eminent domain and private property owners' constitutional rights.

Subject to regulatory and government approvals, utility companies – including foreign utility companies such as TransCanada – can exercise eminent domain in order to undertake large-scale infrastructure projects benefitting the public.

There have been numerous legal challenges to TransCanada's use of eminent domain and private property owners' constitutional rights.

Current Legislative Action? No, next session January 2025

North Dakota

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
(NDCC§ 49-19-01): Definition of Common Pipeline Carriers:
Defines common carriers as entities transporting crude petroleum, gas, coal, or carbon dioxide by pipeline for hire or public use. Includes those managing pipelines under various agreements or transporting natural gas within the state.

(NDCC § 49-19-12): Eminent Domain Authority
Common pipeline carriers that accept the provisions of the chapter may exercise eminent domain, subject to Chapter 32-15. The process mirrors that used for railroads and requires compliance with statutory provisions.

Amendments to the amalgamation statute are anticipated in the 2025 legislative session.

The Public Service Commission's necessity determinations are generally upheld by courts. In Eckre v. Pub. Serv. Comm'n, 247 N.W.2d 656 (N.D. 1976), the court upheld the PSC's authority. In Montana-Dakota Utilities Co. v. Behm, 927 N.W.2d 865 (2019), the North Dakota Supreme Court affirmed that pipelines are presumed to serve a public use as declared by the legislature.

South Dakota

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
§ 21-35 - Condemnation Under Power of Eminent Domain:
Provides procedural requirements for operators.

§ 49-41B - Energy Conversion and Transmission Facilities:
Provides substantive requirements, burden of proof, and other requirements for operators and local authorities to receive a permit for construction or operation of a facility.

SB 201:
Creates new statutory requirements for regulating linear transmission facilities.
Allows counties to impose a surcharge on certain pipeline companies.
Establishes a landowner bill of rights.
Removes local government authority over routes permitted by the commission and limits their taxing powers.
(https://mylrc.sdlegislature.gov/api/Documents/Amendment/266817.pdf)

HB 1185:
Defines landowner's right to challenge a survey in circuit court and receive survey results.
Requires operators to pay $500 to landowners for entering property to survey.
(https://mylrc.sdlegislature.gov/api/Documents/Amendment/267225.pdf)

HB 1186:

Defines 'carbon pipeline easement' and 'initiate business operations.'
Voids easement if operations are not initiated within 5 years.
Requires disclosure that easement holder may mortgage or encumber the easement.
(https://mylrc.sdlegislature.gov/api/Documents/Amendment/267225.pdf)
No case law directly addressing eminent domain utilization for CO_2 pipelines. However, Basin Elec. Power Coop v. Payne, 298 N.W.2d 385 (S.D. 1980), affirmed an electric company's right to

take an easement by eminent domain for an electric transmission line project, supporting eminent domain for energy infrastructure.

In re Ehlebracht v. Crowned Ridge Wind, LLC, 2022 S.D. 46:
The South Dakota Supreme Court affirmed the Public Utilities Commission's (PUC) decision approving a permit to construct a large wind energy farm. The court emphasized statutory compliance, deference to the PUC, and the standard of review under SDCL § 1-23-36.

Texas

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statute, rule, or judicial authority.
The Railroad Commission of Texas is unaware of any challenges or pending legal actions regarding Texas Natural Resources Code § 111.002.

Per Texas Natural Resources Code, §111.002, all CO_2 pipelines are common carriers and have the right and power to exercise eminent domain:
Sec. 111.002. COMMON CARRIERS UNDER CHAPTER. A person is a common carrier subject to the provisions of this chapter if it:

> (1) Owns, operates, or manages a pipeline or any part of a pipeline in the State of Texas for the transportation of crude petroleum to or for the public for hire, or engages in the business of transporting crude petroleum by pipeline;
> (2) Owns, operates, or manages a pipeline or any part of a pipeline in the State of Texas for the transportation of crude petroleum to or for the public for hire and the pipeline is constructed or maintained on, over, or under a public road or highway, or is an entity in favor of whom the right of eminent domain exists;
> (3) Owns, operates, or manages a pipeline or any part of a pipeline in the State of Texas for the transportation of crude petroleum to or for the public for hire which is or may be constructed, operated, or maintained across, on, along, over, or under the right-of-way of a railroad, corporation, or other common carrier required by law to transport crude petroleum as a common carrier;
> (4) Under lease, contract of purchase, agreement to buy or sell, or other agreement or arrangement of any kind, owns, operates, manages, or participates in ownership, operation, or management of a pipeline or part of a pipeline in the State of Texas for the transportation of crude petroleum, bought of others, from an oil field or place of production within this state to any distributing, refining, or marketing center or reshipping point within this state;
> (5) Owns, operates, or manages, wholly or partially, pipelines for the transportation for hire of coal in whatever form or of any mixture of substances including coal in whatever form;
> (6) Owns, operates, or manages, wholly or partially, pipelines for the transportation of carbon dioxide or hydrogen in whatever form to or for the public for hire, but only if such person files with the commission a written acceptance of the provisions of this chapter

expressly agreeing that, in consideration of the rights acquired, it becomes a common carrier subject to the duties and obligations conferred or imposed by this chapter;
(7) Owns, operates, or manages a pipeline or any part of a pipeline in the State of Texas for the transportation of feedstock for carbon gasification, the products of carbon gasification, or the derivative products of carbon gasification, in whatever form, to or for the public for hire, but only if the person files with the commission a written acceptance of the provisions of this chapter expressly agreeing that, in consideration of the rights acquired, it becomes a common carrier subject to the duties and obligations conferred or imposed by this chapter.

Wyoming

Eminent domain authority for carbon dioxide pipelines?
Yes.

Statutes, Rules, and Legislative Activity.
Whenever any utility or any petroleum or other pipeline company, authorized to do business in this state, has not acquired by gift or purchase any land, real estate or claim required for the construction, maintenance and operation of their facilities and appurtenances or which may be affected by any operation connected with the construction or maintenance of the same, the utility or company has the right of eminent domain and may condemn the easement required by the utility or company.

Title 1 - Code of Civil Procedure
Chapter 26 - Eminent Domain
Article 8 - Power of Eminent Domain Granted
Section 1-26-814 - Right of Eminent Domain Granted; Petroleum or Other Pipeline Companies; Purposes.
Universal Citation: WY Stat § 1-26-814 (2020)