

Effective 5/4/2022

Chapter 11 Geologic Carbon Storage

40-11-1 Definitions.

As used in this chapter:

- (1) "Board" means the Board of Oil, Gas, and Mining.
- (2)
 - (a) "Carbon dioxide" means carbon dioxide (CO₂) that has been captured from an emission source or direct air capture, plus incidental associated substances derived from the source materials and the capture process, and any substances added to the carbon dioxide to enable or improve the injection process.
 - (b) "Carbon dioxide" does not include hazardous waste as that term is defined in Section 19-6-102.
- (3) "Class VI injection well" means the same as that term is defined in 40 C.F.R. 146.5(f).
- (4) "Division" means the Division of Oil, Gas, and Mining.
- (5) "Fund" means the Carbon Dioxide Storage Fund created under Section 40-11-23.
- (6) "Geologic carbon storage" means the permanent or short-term underground storage of carbon dioxide in a storage reservoir.
- (7) "Geologic carbon storage activity" means activity associated with the development, production, processing, and storage of carbon dioxide as set forth in Title 40, Chapter 11, Geologic Carbon Storage, and includes:
 - (a) drilling;
 - (b) development of storage facilities;
 - (c) completion, maintenance, reworking, recompletion, disposal, plugging, and abandonment of storage facilities;
 - (d) construction activities;
 - (e) recovery techniques;
 - (f) remediation activities; and
 - (g) any other activity related to geologic carbon storage that the board identifies.
- (8) "Permit" means a permit issued by the division and approved by the board allowing a person to operate a storage facility.
- (9) "Reservoir" means a subsurface sedimentary stratum, formation, aquifer, cavity, or void, whether natural or artificially created, including oil and gas reservoirs, saline formations, and coal seams suitable for or capable of being made suitable for geologic carbon storage.
- (10)
 - (a) "Storage facility" means the reservoir, underground equipment, and surface facilities and equipment used or proposed to be used in a geologic carbon storage operation.
 - (b) "Storage facility" does not include pipelines used to transport carbon dioxide to a storage facility.
- (11) "Storage operator" means a person holding or applying for a permit.

40-11-2 Preemption.

- (1) Regulation of geologic carbon storage is of statewide concern and the state regulation of geologic carbon storage activity occupies the whole field of geologic carbon storage subject to:
 - (a) the granting of primacy over Class VI geologic sequestration wells; and

- (b) relevant federal law.
- (2) The legislative body of a political subdivision may enact, amend, or enforce a local ordinance, resolution, or rule consistent with the political subdivision's general land use authority that:
 - (a) regulates only surface activity that is incidental to geologic carbon storage activity;
 - (b) does not effectively or unduly limit, ban, or prohibit geologic carbon storage activity; and
 - (c) is not otherwise preempted by state or federal law.

Enacted by Chapter 62, 2022 General Session

40-11-3 Board authority -- Rulemaking authority.

- (1) The board and the division have jurisdiction over all persons and property necessary to enforce this chapter.
- (2) To enforce this chapter, the board shall make rules in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, including rules establishing penalties for a violation of this chapter.
- (3) Subject to the granting of primacy by the Environmental Protection Agency under the process required in 40 C.F.R. Section 145 and successful application for primacy approval under Section 1425 of the Safe Drinking Water Act, the board and the division have:
 - (a) exclusive jurisdiction in the state over Class VI injection wells located in the state on nonfederal lands; and
 - (b) cooperative jurisdiction in the state over Class VI injection wells located in the state on federal lands.
- (4) The board shall establish fees in accordance with Section 63J-1-504, in an amount to pay the costs to the board and division of:
 - (a) the permitting process;
 - (b) the regulation of the construction, operation, and pre-closure activities of the storage facility;
 - (c) the monitoring and management of closed storage facilities; and
 - (d) administering the fund.
- (5) In addition to a fee imposed under Subsection (4), the board, in accordance with Section 63J-1-504:
 - (a) may impose fees under Section 40-11-20; and
 - (b) shall impose a fee under Section 40-11-21.

40-11-4 Board and division permit authority.

To the extent required to authorize and issue permits and to regulate geologic carbon sequestration, the board and the division shall have authority:

- (1) over all persons and property necessary to administer and enforce this chapter and this chapter's objectives;
- (2) to regulate activities relating to a storage facility, including construction, operation, and closure;
- (3) to enter, at a reasonable time and manner, a storage facility to:
 - (a) inspect equipment and surface storage facilities;
 - (b) observe, monitor, and investigate operations; or
 - (c) inspect records the board requires the operators maintain at the storage facility;
- (4) to require that storage operators provide assurance, including bonds, that money is available to fulfill the storage operator's duties;
- (5) to exercise continuing jurisdiction over storage operators and storage facilities, including the authority, after notice and hearing, to amend provisions in a permit and to revoke a permit;

- (6) to dissolve or change the boundaries of any unit that is within or near a storage reservoir's boundaries; and
- (7) to oversee the expenditure of money from the fund to accomplish the purposes of this chapter.

40-11-5 Permits.

- (1) Subject to the granting of primacy as described in Section 40-11-3, the board may authorize the division to issue a permit.
- (2) A person may only transfer a permit to another person with permission of the board.
- (3) A person may not engage in geologic carbon storage in the state without a permit.

Enacted by Chapter 62, 2022 General Session

40-11-6 Permit application requirements.

- (1) A person applying for a permit shall:
- (2)
 - (a) comply with:
 - (i) the application requirements the board establishes through rule; and
 - (ii) the application requirements described in this section; and
 - (b) pay a fee, as established by the board in accordance with Subsections 40-11-3(4) and (5), to cover the administrative costs of considering an application for a permit and to pay the expenditures of money from the fund to accomplish the purposes of this chapter.
- (3) The board shall give priority to storage operators who apply for a permit to store carbon dioxide produced in Utah.
- (4) A permit application shall demonstrate:
 - (a) that the storage operator has complied with all requirements established by the board in rule and in this chapter;
 - (b) that the storage facility is suitable for carbon dioxide injection and storage;
 - (c) that the carbon dioxide the storage operator will store is of a quality that allows the carbon dioxide to be safely and efficiently stored in the reservoir;
 - (d) that the storage operator has made a good-faith effort to get the consent of all persons who own the storage reservoir's pore space;
 - (e) that owners who own no less than 70% of the reservoir's pore space have provided written consent to the use of the owners' pore space for a storage facility;
 - (f) whether the storage facility contains commercially valuable minerals;
 - (g) if the storage facility contains commercially valuable minerals:
 - (i) a plan for addressing the ownership interests of the mineral owners or mineral lessees; and
 - (ii) a demonstration that the storage facility will not negatively impact the commercially valuable minerals;
 - (h) that the storage reservoir meets the integrity requirements described in Section 40-11-13;
 - (i) that the operator has taken reasonable steps to ensure that:
 - (i) the storage facility will not endanger human health;
 - (ii) the storage facility will not endanger the environment;
 - (iii) the storage facility is in the public interest;
 - (iv) the storage facility will not adversely affect surface water or formation containing fresh water;
 - (v) carbon dioxide will not escape from the storage reservoir at a rate exceeding the lower of 1% or the standard recommended by the Environmental Protection Agency; and

- (vi) that substances that compromise the objectives of this chapter or the integrity of a reservoir will not enter the reservoir;
- (j) that the storage reservoir has defined horizontal and vertical boundaries;
- (k) that the boundaries of the storage reservoir include buffer areas to ensure the safe operation of the storage facility;
- (l) plans for monitoring the storage facility and procedures to assess the location and migration of carbon dioxide injected for storage;
- (m) plans to ensure compliance with geologic carbon storage statutes and rules; and
- (n) assurance that all nonconsenting pore space owners are or will be equitably compensated for the use of the pore space of the nonconsenting pore space owners in the storage facility.

40-11-7 Permit hearing.

- (1) The board shall hold a public hearing before authorizing the division to issue a permit.
- (2) The board shall conduct the hearing in accordance with Title 63G, Chapter 4, Administrative Procedures Act.
- (3) The board shall give notice no fewer than 30 days prior to the hearing by:
 - (a) one publication in a daily newspaper of general circulation in Salt Lake City, Utah;
 - (b) in all newspapers of general circulation published in the county or counties in which the land affected is situated; and
 - (c) by publication in accordance with Section 45-1-101.
- (4) In addition to the notice required in Subsection (3), an applicant shall provide notice of the hearing and a copy of the permit application, no fewer than 30 days before the hearing to:
 - (a) each mineral lessee within one-half mile of the storage reservoir's boundaries;
 - (b) each mineral owner within one-half mile of the storage reservoir's boundaries;
 - (c) each pore space owner within one-half mile of the storage reservoir's boundaries;
 - (d) each surface owner of land within one-half mile of the storage reservoir's boundaries; and
 - (e) any additional person the board identifies.
- (5) An applicant shall serve the notice described in Subsection (4) through personal service.
- (6) The board may, in accordance with the requirements of Section 63G-6a-116, procure the services of an administrative law judge to conduct the hearing described in Subsection (1).
- (7) If the board procures the services of an administrative law judge, the board may rely on the decision of the administrative law judge when deciding whether to issue a permit.

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40-11-8 Findings to issue a permit.

Before issuing a permit, the board shall find that:

- (1) the application meets all of the requirements described in Section 40-11-6; and
- (2) the interested parties described in Subsection 40-11-7(4) all received proper notice.

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40-11-9 Permit provisions.

- (1) A permit shall require that:
 - (a) an operator remain in compliance with all of the permit requirements described in Subsection 40-11-6(3); and
 - (b) an operator comply with any additional provisions the board imposes.

- (2) The board may make a permit contingent upon:
- (a) the payment of fair compensation to pore space owners who do not consent to the use of the owners' pore space for geologic carbon storage;
 - (b) the recording of the permit as described in Section 40-11-12; and
 - (c) additional provisions to protect the environment and the property interests of the parties described in Subsection 40-11-7(4).

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40-11-10 Amalgamation of interests -- Board may order amalgamation -- Payment of costs and interests -- Accounting.

- (1) Two or more owners of contiguous pore space may bring together the owners' interests for the development of a storage facility.
- (2)
- (a) In the absence of a written agreement for amalgamation, including a joint operating agreement, the board may enter an order combining all interests in the contiguous pore space for the development of a storage facility.
 - (b) The order shall be made upon terms and conditions that are just and reasonable.
 - (c) The board may adopt terms appearing in a joint operating agreement:
 - (i) for the storage facility that is in effect between the consenting owners;
 - (ii) submitted by any party to the proceeding; or
 - (iii) submitted by the board on the board's own motion.
- (3) Operations incident to the construction or operation of a storage facility upon any portion of an area included in an amalgamation order shall be deemed for all purposes to be the conduct of the operations upon each separately owned tract in the area by the several orders.
- (4)
- (a)
 - (i) Each amalgamation order shall provide for the payment of just and reasonable costs incurred in the construction and operation of the storage facility, including:
 - (A) the costs of constructing, marketing, completing, and operating the storage facility;
 - (B) reasonable charges for the administration and supervision of operations; and
 - (C) other costs customarily incurred in the industry.
 - (ii) An owner is not liable under an amalgamation order for costs or losses resulting from the gross negligence or willful misconduct of the operator.
 - (b) Each amalgamation order shall provide for reimbursement to the consenting owners for any nonconsenting owner's share of the costs of operation of the storage facility attributable to the nonconsenting owner's tract.
 - (c) Each amalgamation order shall provide that each consenting owner shall own and be entitled to receive, subject to taxes, fees, fines, and other obligations:
 - (i) the share of the profits of the storage facility applicable to the consenting owner's interest in the storage facility; and
 - (ii) unless the consenting owner has agreed otherwise, the consenting owner's proportionate part of the nonconsenting owner's share of the profits until the recovery of costs provided for in Subsection (4)(d).
 - (d)
 - (i) Each amalgamation order shall provide that each nonconsenting owner shall be entitled to receive, subject to obligations, the share of the profits from the storage facility applicable to the nonconsenting owner's interest in the storage facility after the consenting owners have

recovered from the nonconsenting owner's share of the profits the following amounts less any cash contributions the nonconsenting owner has made:

- (A) 100% of the nonconsenting owner's share of the cost of storage facility construction and maintenance;
 - (B) 100% of the nonconsenting owner's share of the estimated cost to close the storage facility as the board determines;
 - (C) 100% of the nonconsenting owner's share of the cost of operation of the storage facility commencing with the first injection of carbon dioxide and continuing until the consenting owners have recovered all costs; and
 - (D) 100% of the nonconsenting owner's share of the costs of preparing the storage facility, rights-of-way, and equipment.
- (ii) The nonconsenting owner's share of the costs specified in Subsection (4)(d)(i) is that interest which would have been chargeable to the nonconsenting owner had the nonconsenting owner initially agreed to pay the nonconsenting owner's share of the costs of the storage facility from commencement of the operation.
 - (iii) The board may include a reasonable interest charge if the board finds it appropriate.
- (e) The board shall determine the proper costs to resolve any dispute about costs.
- (5) The operator of a storage facility under an amalgamation order in which there is a nonconsenting owner shall furnish the nonconsenting owner with monthly statements specifying:
 - (a) costs incurred; and
 - (b) profit realized.
 - (6) Each amalgamation order shall provide that when the consenting owners recover from a nonconsenting owner's relinquished interest the amounts provided for in Subsection (4)(d):
 - (a) the relinquished interest of the nonconsenting owner shall automatically revert to the nonconsenting owner;
 - (b) the nonconsenting owner shall from that time:
 - (i) own the same interest in the storage facility; and
 - (ii) be liable for the further costs of the operation as if the nonconsenting owner had participated in the initial drilling and operations; and
 - (iii) costs are payable out of profits unless otherwise agreed between the nonconsenting owner and the operator.
 - (7) Each amalgamation order shall provide that in any circumstance where the nonconsenting owner has relinquished the nonconsenting owner's share of profits to consenting owners or at any time fails to take the nonconsenting owner's share of benefits when the nonconsenting owner is entitled to do so, the nonconsenting owner is entitled to:
 - (a) an accounting of the profits applicable to the nonconsenting owner's relinquished share of the storage facility; and
 - (b) payment of the profits applicable to that share of the profits not taken in-kind, net of costs.
 - (8) A nonconsenting owner who does not take the nonconsenting owner's share of the profits is not liable for the costs described in Subsection (4)(d) and is not liable for any actions the operator takes with respect to the storage facility.

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40-11-11 Geologic carbon storage amalgamation unit -- Procedure for establishment -- Operation.

- (1) The board may hold a hearing to consider the need for the amalgamation of a tract for geologic carbon storage.
- (2) The board shall make an order providing for the amalgamation of a tract for geologic carbon storage, if the board finds that:
 - (a) amalgamation is reasonably necessary for the purposes of this chapter; and
 - (b) the value of amalgamation justifies proceeding against the nonconsenting owner's wishes.
- (3) The amalgamation order shall include:
 - (a) a description of the lands and of the reservoir to become a storage facility;
 - (b) a statement of the nature of the operations contemplated;
 - (c) an allocation to the separately owned tracts in the amalgamation unit of the profits the storage facility receives, considering:
 - (i) agreements among interested parties; and
 - (ii) the relative value of the separately owned tracts within the amalgamation area;
 - (d) a provision for adjustment among the owners of the amalgamation area for investments made prior to the amalgamation order;
 - (e) a provision determining the allocation of costs among owners, and how the owners shall pay those costs;
 - (f) any necessary provision for:
 - (i) financing an owner; or
 - (ii) carrying an owner;
 - (g) a provision for the supervision and conduct of the storage facility operations, including a percentage vote for each owner;
 - (h) additional provisions that are necessary and appropriate for carrying on the operation of the amalgamation unit; and
 - (i) the designation of an operator of the amalgamation unit.
- (4) An amalgamation order described in Subsection (3) shall only be effective after the plan for operating the storage facility is approved in writing by:
 - (a) owners whose obligations under the amalgamation order require them to pay not less than 70% of the costs for operating and constructing the facility; and
 - (b) owners whose combined interest under the amalgamation order is not less than 70% of the profits from the operation of the storage facility.

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40-11-12 Requirement to record.

An operator shall file a record of the permit and a description of the impacted land with the recorder's office in each county where the storage facility is located.

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40-11-13 Reservoir integrity.

- (1) Carbon dioxide injected into and stored in a reservoir in compliance with the requirements of this section is not:
 - (a) pollution, as that term is defined in Section 4-18-103; or
 - (b) a nuisance, as that term is defined in Section 4-44-102.
- (2) A reservoir is only appropriate for geologic carbon storage if the board determines and the operator demonstrates that:

- (a) carbon dioxide cannot escape the reservoir at a rate exceeding the lower of 1% or the standard recommended by the Environmental Protection Agency;
 - (b) no additional substances will be introduced into the storage facility that could compromise the integrity of the storage reservoir; and
 - (c) the operator has a plan to maintain the integrity of the reservoir.
- (3) When making a determination described in Subsection (2), the board may rely upon:
- (a) a finding from the Utah Geological Survey, created in Section 79-3-201 that the reservoir is appropriate for the storage of carbon dioxide; and
 - (b) reports and findings from the Department of Environmental Quality, created in Section 19-1-104.
- (4) The board shall take action to enforce the provisions of this section.

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40-11-14 Preservation of rights.

Nothing in this chapter or in a permit may be interpreted to:

- (1) prejudice the rights of property owners who own property that hosts a storage facility to the extent that those property rights are not committed to the storage facility;
- (2) prevent a mineral owner or mineral lessee from drilling through or near a storage reservoir to explore or develop mineral resources to the extent that the exploration and development:
 - (a) preserves the integrity of the storage facility; and
 - (b) complies with requirements described in this chapter.

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40-11-15 Title to injected carbon dioxide.

- (1) The storage operator has title to the carbon dioxide injected into and stored in a storage reservoir and holds title until the board issues a certificate of project completion.
- (2) The storage operator is liable for any damage the stored carbon dioxide may cause, including damage caused by escaping stored carbon dioxide until the board issues a certificate of project completion.
- (3) An owner of pore space does not incur liability for geologic carbon storage activity by virtue of ownership of or of leasing out the pore space.

40-11-16 Certificate of project completion.

- (1) To request a certificate of project completion, a storage operator shall submit:
 - (a) a demonstration that the last carbon dioxide injection was no fewer than 10 years preceding the filing;
 - (b) a statement of compliance with all statutes and rules regulating the storage facility;
 - (c) a demonstration of the resolution of all pending claims regarding the storage facility;
 - (d) a demonstration of the present and future physical integrity of the storage reservoir;
 - (e) a demonstration that any carbon dioxide in the storage reservoir:
 - (i) is essentially stationary; or
 - (ii) if the carbon dioxide migrates or will migrate, is highly unlikely to cross the storage reservoir boundary;

- (f) a demonstration that all wells, equipment, and facilities necessary for maintaining the continued integrity of the storage reservoir are currently in good condition and will maintain that good condition;
 - (g) a demonstration that the operator has:
 - (i) plugged wells;
 - (ii) removed equipment and facilities not necessary to maintaining the integrity of the reservoir; and
 - (iii) completed any other reclamation work the board requires.
- (2) Immediately after the board issues a certificate of project completion:
- (a) title to the storage facility and the stored carbon dioxide, including oversight of a facility used to store the stored carbon dioxide, transfers to the state;
 - (b) liability with respect to the storage facility and the stored carbon dioxide transfers to the state;
 - (c) the storage operator and any person who is not the state who has property rights in the storage facility is released from any obligation to comply with regulatory requirements associated with the storage facility;
 - (d) the board shall release any bonds the storage operator has posted; and
 - (e) the division shall oversee the monitoring and managing of the storage facility.

40-11-17 Application of this chapter to enhanced recovery projects.

- (1) This chapter does not apply to the injection of carbon dioxide for an enhanced oil or gas recovery project.
- (2)
 - (a) This chapter does apply to the conversion of an enhanced oil or gas recovery project to a storage facility.
 - (b) To accommodate the conversion described in Subsection (2)(a), the board may make additional rules to allow for circumstances unique to the conversion of an enhanced oil and gas recovery project to a storage facility and not otherwise anticipated under this chapter.

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40-11-18 Cooperative agreements and contracts.

- (1) The board may enter into an agreement with another government, government entity, or state agency for the purpose of carrying out the objectives described in this chapter.
- (2) The board may enter into a contract with a private person in order for the board to carry out the board's objectives.
- (3) The board shall follow Title 63G, Chapter 6a, Utah Procurement Code, when entering into an agreement or contract described in Subsection (1) or (2).

Enacted by Chapter 62, 2022 General Session

40-11-19 Participation of public interests.

The governing body of a controlling state interest or interest of a political subdivision is authorized to consent to and participate in a geologic carbon storage project.

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40-11-20 Adoption of procedure.

- (1) The board may adopt procedures and criteria to determine the amount of injected carbon dioxide:
 - (a) stored in a reservoir that has been or is being used for an enhanced oil or gas recovery project; or
 - (b) stored in a reservoir that is a part of a storage facility.
- (2) The board may charge a fee to cover the costs of making a determination described in Subsection (1).
- (3) The division shall deposit a fee collected in accordance with Subsection (2) into the fund.

40-11-21 Fees related to reservoir or storage facility.

- (1) There is levied a fee per ton of carbon dioxide injected into a reservoir or storage facility.
- (2) The board shall establish the fee described in Subsection (1) in accordance with Section 63J-1-504 to equal the sum of:
 - (a) an amount to pay the anticipated costs to the division of the regulation of storage facility:
 - (i) construction;
 - (ii) operation; and
 - (iii) pre-closure activities; and
 - (b) an amount to pay the anticipated costs to the division of the long-term monitoring and management of a closed storage facility.
- (3) The division shall deposit money collected under this section into the fund.

40-11-23 Carbon Dioxide Storage Fund.

- (1) There is created an expendable special revenue fund known as the "Carbon Dioxide Storage Fund."
- (2) The fund shall consist of:
 - (a) money from fees collected under Subsection 40-11-3(4) and Sections 40-11-20 and 40-11-21;
 - (b) penalties imposed for violations of this chapter; and
 - (c) interest or other earnings for the fund.
- (3) The state treasurer shall invest the money in the fund according to Title 51, Chapter 7, State Money Management Act, except that interest or other earnings derived from those investments shall be deposited into the fund.
- (4) The division shall only use the money in the fund to:
 - (a) defray the division's regulatory expenses incurred during the regulation of a storage facility:
 - (i) construction;
 - (ii) operation; and
 - (iii) pre-closure activities;
 - (b) make determinations in accordance with Section 40-11-20;
 - (c) reimburse a regulatory agency with whom the board has entered into a cooperative agreement described in Section 40-11-18 for expenses the cooperating agency incurs in conducting the activities described in Subsections (4)(a) and (b);
 - (d) permit, inspect, monitor, investigate, record, and report on geologic storage facilities and associated carbon dioxide injection wells;
 - (e) perform long-term monitoring of geologic storage facilities and associated carbon dioxide injection wells;
 - (f) remediate mechanical problems associated with geologic storage facilities and associated carbon dioxide injection wells;

- (g) repair mechanical leaks at geologic storage facilities;
- (h) plug abandoned carbon dioxide injection wells used for geologic storage;
- (i) training and technology transfer related to carbon dioxide injection and geologic storage;
- (j) perform compliance and enforcement activities related to geologic storage and associated man-made carbon dioxide injection wells; and
- (k) oversee the management of the geologic storage facilities and associated carbon dioxide injection wells after site closure.