

## **CHAPTER 38-22 CARBON DIOXIDE UNDERGROUND STORAGE**

### **38-22-01. Policy.**

It is in the public interest to promote the geologic storage of carbon dioxide. Doing so will benefit the state and the global environment by reducing greenhouse gas emissions. Doing so will help ensure the viability of the state's coal and power industries, to the economic benefit of North Dakota and its citizens. Further, geologic storage of carbon dioxide, a potentially valuable commodity, may allow for its ready availability if needed for commercial, industrial, or other uses, including enhanced recovery of oil, gas, and other minerals. Geologic storage, however, to be practical and effective requires cooperative use of surface and subsurface property interests and the collaboration of property owners. Obtaining consent from all owners may not be feasible, requiring procedures that promote, in a manner fair to all interests, cooperative management, thereby ensuring the maximum use of natural resources.

### **38-22-02. Definitions.**

As used in this chapter, unless the context requires otherwise:

1. "Carbon dioxide" means carbon dioxide produced by anthropogenic sources which is of such purity and quality that it will not compromise the safety of geologic storage and will not compromise those properties of a storage reservoir which allow the reservoir to effectively enclose and contain a stored gas.
2. "Commission" means the industrial commission.
3. "Geologic storage" means the permanent or short-term underground storage of carbon dioxide in a storage reservoir.
4. "Permit" means a permit issued by the commission allowing a person to operate a storage facility.
5. "Pore space" means a cavity or void, whether natural or artificially created, in a subsurface sedimentary stratum.
6. "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 injecting and storing carbon dioxide.
7. "Storage facility" means the reservoir, underground equipment, and surface facilities and equipment used or proposed to be used in a geologic storage operation. It does not include pipelines used to transport carbon dioxide to the storage facility.
8. "Storage operator" means a person holding or applying for a permit.
9. "Storage reservoir" means a reservoir proposed, authorized, or used for storing carbon dioxide.

### **38-22-03. Commission authority.**

The commission has authority:

1. Over all persons and property necessary to administer and enforce this chapter and its 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 inspect equipment and facilities; to observe, monitor, and investigate operations; and to inspect records required to be maintained at the 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 commission-established oil or gas field or unit that is within or near a storage reservoir's boundaries.

7. To grant, for good cause, exceptions to this chapter's requirements and implementing rules.

**38-22-04. Permit required - Permit transfer.**

Geologic storage is allowed if permitted by the commission. A permit may be transferred if the commission consents.

**38-22-05. Permit applications, fees, costs, and priorities - Carbon dioxide storage facility administrative fund.**

1. A person applying for a permit shall:
  - a. Comply with application requirements set by the commission.
  - b. Pay a fee in an amount set by the commission. The amount of the fee must be set by rule and must be based on the commission's anticipated cost of processing the application. The fee must be deposited in the carbon dioxide storage facility administrative fund.
  - c. Pay to the commission the costs the commission incurs in publishing notices for hearings and holding hearings on permit applications.
2. In processing permit applications the commission shall give priority to storage operators who intend to store carbon dioxide produced in North Dakota.

**38-22-06. Permit hearing - Hearing notice.**

1. The commission shall hold a public hearing before issuing a permit.
2. Notice of the hearing must be published for two consecutive weeks in the official newspaper of the county or counties where the storage reservoir is proposed to be located and in any other newspaper the commission requires. Publication deadlines must comply with commission requirements.
3. Notice of the hearing must be given to each mineral lessee, mineral owner, and pore space owner within the storage reservoir and within one-half mile of the storage reservoir's boundaries.
4. Notice of the hearing must be given to each surface owner of land overlying the storage reservoir and within one-half mile of the reservoir's boundaries.
5. Notice of the hearing must be given to any additional persons that the commission requires.
6. Service of hearing notices required by this section must conform to personal service provisions in rule 4 of the North Dakota Rules of Civil Procedure.
7. Hearing notices required by this section must comply with deadlines set by the commission.
8. Hearing notices required by this section must contain the information the commission requires.

**38-22-07. Permit consultation.**

Before issuing a permit, the commission shall consult the department of environmental quality.

**38-22-08. Permit requirements.**

Before issuing a permit, the commission shall find:

1. That the storage operator has complied with all requirements set by the commission.
2. That the storage facility is suitable and feasible for carbon dioxide injection and storage.
3. That the carbon dioxide to be stored is of a quality that allows it to be safely and efficiently stored in the storage reservoir.
4. 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.
5. That the storage operator has obtained the consent of persons who own at least sixty percent of the storage reservoir's pore space.

6. Whether the storage facility contains commercially valuable minerals and, if it does, a permit may be issued only if the commission is satisfied that the interests of the mineral owners or mineral lessees will not be adversely affected or have been addressed in an arrangement entered into by the mineral owners or mineral lessees and the storage operator.
7. That the proposed storage facility will not adversely affect surface waters or formations containing fresh water.
8. That carbon dioxide will not escape from the storage reservoir.
9. That substances that compromise the objectives of this chapter or the integrity of a storage reservoir will not enter a storage reservoir.
10. That the storage facility will not endanger human health nor unduly endanger the environment.
11. That the storage facility is in the public interest.
12. That the horizontal and vertical boundaries of the storage reservoir are defined. These boundaries must include buffer areas to ensure that the storage facility is operated safely and as contemplated.
13. That the storage operator will establish monitoring facilities and protocols to assess the location and migration of carbon dioxide injected for storage and to ensure compliance with all permit, statutory, and administrative requirements.
14. That all nonconsenting pore space owners are or will be equitably compensated.

**38-22-09. Permit provisions.**

The commission may include in a permit or order all things necessary to carry out this chapter's objectives and to protect and adjust the respective rights and obligations of persons affected by geologic storage.

**38-22-10. Amalgamating property interests.**

If a storage operator does not obtain the consent of all persons who own the storage reservoir's pore space, the commission may require that the pore space owned by nonconsenting owners be included in a storage facility and subject to geologic storage.

**38-22-11. Certificate.**

When the commission issues a permit it shall also issue a certificate stating that the permit has been issued, describing the area covered, and containing other information the commission deems appropriate. The commission shall file a copy of the certificate with the county recorder in the county or counties where the storage facility is located.

**38-22-12. Environmental protection - Reservoir integrity.**

1. The commission shall take action to ensure that a storage facility does not cause pollution or create a nuisance. For the purposes of this provision and in applying other laws, carbon dioxide stored, and which remains in storage under a commission permit, is not a pollutant nor does it constitute a nuisance.
2. The commission's authority in subsection 1 does not limit the jurisdiction held by the department of environmental quality. Nothing else in this chapter limits the jurisdiction held by the department of environmental quality.
3. The commission shall take action to ensure that substances that compromise the objectives of this chapter or the integrity of a storage reservoir do not enter a storage reservoir.
4. The commission shall take action to ensure that carbon dioxide does not escape from a storage facility.

**38-22-13. Preservation of rights.**

Nothing in this chapter nor the issuing of a permit:

1. Prejudices the rights of property owners within a storage facility to exercise rights that have not been committed to a storage facility.

2. Prevents a mineral owner or mineral lessee from drilling through or near a storage reservoir to explore for and develop minerals, provided the drilling, production, and related activities comply with commission requirements that preserve the storage facility's integrity and protect this chapter's objectives.

**38-22-14. Fees - Carbon dioxide storage facility administrative fund - Continuing appropriation.**

1. Storage operators shall pay the commission a fee on each ton of carbon dioxide injected for storage. The fee must be in the amount set by commission rule. The amount must be based on the contribution of the storage facility and the source of the carbon dioxide to the energy and agriculture production economy of North Dakota and the commission's anticipated expenses that it will incur in regulating storage facilities during their construction, operational, and preclosure phases.
2. The fee must be deposited in the carbon dioxide storage facility administrative fund. The fund must be maintained as a special fund and all money in the fund is appropriated and may be used only for defraying the commission's expenses in processing permit applications; regulating storage facilities during their construction, operational, and preclosure phases; and making storage amount determinations under section 38-22-23. The commission, however, through a cooperative agreement with another state agency, may use the fund to compensate the cooperating agency for expenses the cooperating agency incurs in carrying out regulatory responsibilities that agency may have over a storage facility. Interest earned by the fund must be deposited in the fund.

**38-22-15. Fees - Carbon dioxide storage facility trust fund - Continuing appropriation.**

1. Storage operators shall pay the commission a fee on each ton of carbon dioxide injected for storage. The fee must be in the amount set by commission rule. The amount must be based on the contribution of the storage facility and the source of the carbon dioxide to the energy and agriculture production economy of North Dakota and the commission's anticipated expenses associated with the long-term monitoring and management of a closed storage facility.
2. The fee must be deposited in the carbon dioxide storage facility trust fund. The fund must be maintained as a special fund and all money in the fund is appropriated and may be used only for defraying expenses the commission incurs in long-term monitoring and management of a closed storage facility. The commission, however, through a cooperative agreement with another state agency, may use the fund to compensate the cooperating agency for expenses the cooperating agency incurs in carrying out regulatory responsibilities that agency may have over a storage facility. Interest earned by the fund must be deposited in the fund.
3. The industrial commission shall file with the director of the legislative council a report discussing whether the amount in the carbon dioxide storage facility trust fund and fees being paid into it are sufficient to satisfy the fund's objectives. The first report is due in December of 2014 and subsequent reports are due every four years thereafter.

**38-22-16. Title to carbon dioxide.**

The storage operator has title to the carbon dioxide injected into and stored in a storage reservoir and holds title until the commission issues a certificate of project completion. While the storage operator holds title, the operator is liable for any damage the carbon dioxide may cause, including damage caused by carbon dioxide that escapes from the storage facility.

**38-22-17. Certificate of project completion - Release - Transfer of title and custody.**

1. After carbon dioxide injections into a reservoir end and upon application by the storage operator, the commission shall consider issuing a certificate of project completion.
2. The certificate may only be issued after public notice and hearing. The commission shall establish notice requirements for this hearing.

3. The certificate may only be issued after the commission has consulted with the department of environmental quality.
4. The certificate may not be issued until at least ten years after carbon dioxide injections end.
5. The certificate may only be issued if the storage operator:
  - a. Is in full compliance with all laws governing the storage facility.
  - b. Shows that it has addressed all pending claims regarding the storage facility's operation.
  - c. Shows that the storage reservoir is reasonably expected to retain the carbon dioxide stored in it.
  - d. Shows that the carbon dioxide in the storage reservoir has become stable. Stored carbon dioxide is stable if it is essentially stationary or, if it is migrating or may migrate, that any migration will be unlikely to cross the storage reservoir boundary.
  - e. Shows that all wells, equipment, and facilities to be used in the postclosure period are in good condition and retain mechanical integrity.
  - f. Shows that it has plugged wells, removed equipment and facilities, and completed reclamation work as required by the commission.
6. Once a certificate is issued:
  - a. Title to the storage facility and to the stored carbon dioxide transfers, without payment of any compensation, to the state.
  - b. Title acquired by the state includes all rights and interests in, and all responsibilities associated with, the stored carbon dioxide.
  - c. The storage operator and all persons who generated any injected carbon dioxide are released from all regulatory requirements associated with the storage facility.
  - d. Any bonds posted by the storage operator must be released.
  - e. Monitoring and managing the storage facility is the state's responsibility to be overseen by the commission until such time as the federal government assumes responsibility for the long-term monitoring and management of storage facilities.

#### **38-22-18. Penalties.**

1. A person who violates a provision of this chapter or a commission rule or order under this chapter is subject to a civil penalty imposed by the commission or a court not to exceed twelve thousand five hundred dollars for each offense, and each day's violation is a separate offense. Paying the penalty does not make legal an illegal act nor relieve a person on whom the penalty is imposed from correcting the violation or from liability for damages caused by the violation.
2. In determining the amount of the penalty, the commission shall consider:
  - a. The nature of the violation, including its circumstances and gravity, and the hazard or potential hazard to the public's or a private person's health, safety, and economic welfare.
  - b. The economic or environmental harm caused by the violation.
  - c. The economic value or other advantage gained by the person committing the violation.
  - d. The history of previous violations.
  - e. The amount necessary to deter future violations.
  - f. Efforts to correct the violation.
  - g. Other matters justice requires.

#### **38-22-19. Enhanced recovery projects.**

1. This chapter does not apply to applications filed with the commission proposing to use carbon dioxide for an enhanced oil or gas recovery project, rather such applications will be processed under chapter 38-08.
2. The commission may allow an enhanced oil or gas recovery project to be converted to a storage facility. In considering whether to approve a conversion, and upon conversion, the provisions of this chapter and its implementing rules apply, but if during

the conversion process unique circumstances arise, the commission, to better ensure that the chapter's objectives are fulfilled, may waive such provisions and may impose additional ones.

**38-22-20. Cooperative agreements and contracts.**

1. The commission may enter into agreements with other governments, government entities, and state agencies for the purpose of carrying out this chapter's objectives.
2. The commission may enter into contracts with private persons to assist it in carrying out this chapter's objectives. Unless the circumstances require otherwise, the commission shall, in entering such contracts, follow the process set out in section 38-08-04.4. If an emergency exists the commission may enter contracts without public notice and without competitive bidding.

**38-22-21. Trusts, monopolies, restraint of trade.**

Cooperative operation of a storage facility permitted by the commission does not violate North Dakota statutes relating to trusts, monopolies, or restraint of trade.

**38-22-22. Participation of public interests.**

The entity or official controlling state interests or the interests of political subdivisions is authorized to consent to and participate in a geologic storage project.

**38-22-23. Determining storage amounts - Carbon credits - Fee.**

1. The commission, under procedures and criteria it may adopt, shall determine the amount of injected carbon dioxide stored in a reservoir that has been or is being used for an enhanced oil or gas recovery project. The commission may also make such a determination for carbon dioxide stored under this chapter.
2. The purpose for determining storage amounts is to facilitate using the stored carbon dioxide for such matters as carbon credits, allowances, trading, emissions allocations, and offsets, and for other similar purposes.
3. The commission may charge a reasonable fee to the person requesting a storage determination. The fee must be set by rule.
4. Fees the commission receives for storage determinations must be deposited into the carbon dioxide storage facility administrative fund.