

A Review of State and Provincial Action to Create a Legal and Regulatory Infrastructure for Storage of Carbon Dioxide in Geologic Structures

Overview

With the IOGCC's adoption and release on September 24, 2007, of its guidance document for states ([Storage of Carbon Dioxide in Geologic Structures: A Legal and Regulatory Guide for States and Provinces](#)¹), states and Canadian provinces had the tools they needed to begin contemplating development of laws and regulations to govern the geologic storage of carbon within their jurisdictions. Within 6 months of release of the IOGCC document states and provinces had begun to develop legal and regulatory frameworks for the geologic storage of carbon: Washington state made use of the IOGCC document to develop regulations. Wyoming developed legislation that was passed and signed into law. Since that time, Washington and Wyoming have been joined by North Dakota, Louisiana, Montana, Ohio, Texas, and Oklahoma in passing legislation. Regulations have been promulgated in North Dakota and Kansas. As this report goes to print, development of regulations is expected soon in Wyoming and Texas. In addition, many more states and provinces have created working groups and processes, often mandated by legislation, to develop frameworks by proscribed dates.

The legal and regulatory framework governing storage of CO₂ in the course of EOR or gas recovery already exists in most oil and natural gas producing states and provinces. What follows, therefore, is a summary of what has transpired over the last two years in states and Canadian provinces in the development of laws and regulations for the non-EOR-related geologic storage of carbon. It is noted that the cutoff date for inclusion of information for this report was April 1, 2010, and therefore very little, if any, information is included that pertains to 2010 legislation. For information on legal and regulatory developments in states and provinces in 2010 and beyond, please reference the [IOGCC Groundwork website](#).²

Following are summaries of state legislative and regulatory progress for individual states. In Section A of Part 2, states that have either developed or are developing a regulatory framework are listed with states that have made the most progress at the front of the list.

Section B lists states that have taken some form of action in developing a regulatory framework but are still in the beginning stages or have not passed substantive legislation or promulgated rules. States are listed in alphabetical order. Section C lists states with little or no activity in alphabetical order. Anecdotal information is provided when available. Finally, Section D lists the Canadian provinces in alphabetical order.

¹ Interstate Oil and Gas Compact Commission, *supra* note 2.

² Interstate Oil and Gas Compact Commission, Groundwork – Carbon Sequestration State Progress <http://groundwork.iogcc.org/topics-index/carbon-sequestration/state-progress>,

Table 1. States with CCGS Regulatory Frameworks

State	Laws Passed	Laws Pending	Rules
Illinois	Limited		
Kansas			02/2010
Louisiana	G,P,A,L		Not yet begun
Montana	G,P,A,L		Awaiting development of EPA final rule
North Dakota	G,P,A,L		04/2010
Ohio		G	Expected to begin summer 2010
Oklahoma	G		Verification of carbon credits for CO2 storage
Texas	G,A		Pending public comment period
Utah			Anticipated 2011
Washington	P,A,L		07/2008
West Virginia	G		Anticipated 2011
Wyoming	G,P,A		Pending public comment period

G=General Provisions; P=Pore Space Ownership; A=Aggregation of Storage Rights; L=Long-Term Liability

Table 2. States with CCGS Legislative/Regulatory Activity *

Alaska	Idaho	Michigan	Pennsylvania
California	Indiana	New Mexico	Virginia
Colorado	Kentucky	North Carolina	

**In alphabetical order*

Table 3. States with Little or No CCGS Legislative/Regulatory Activity *

Alabama	Hawaii	Missouri	Oregon
Arkansas	Iowa	Nebraska	Rhode Island
Arizona	Maine	Nevada	South Carolina
Connecticut	Maryland	New Hampshire	South Dakota
Delaware	Massachusetts	New Jersey	Tennessee
Florida	Minnesota	New York	Vermont
Georgia	Mississippi		Wisconsin

**In alphabetical order*

Table 4. Canadian Provinces and Territories*

Alberta	Newfoundland & Labrador	Saskatchewan
British Columbia	Nova Scotia	Yukon

**IOGCC International Affiliates*

A. States with CCGS Regulatory Frameworks

Illinois

Summary: Limited substantive legislation. No regulations.

Illinois has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. In August of 2009, the Illinois Legislature passed [HB 3854](#)³ which establishing the Carbon Capture and Storage Legislative Commission. The CCS Legislative Commission is tasked with making a report to the Illinois General Assembly by December 31, 2010, pertaining to specific legislation on CCS. HB 3854 also amended the Illinois Power Agency Act to allow the agency to acquire by eminent domain permanent easements for the distribution, transportation, and storage of CO₂.

Kansas

Summary: No substantive legislation has been passed. Regulations covering the general framework for geologic storage in the state have been promulgated and were effective on February 25, 2010. Left unaddressed legislatively and in the regulations are pore space ownership, aggregation of storage rights, and long-term liability.

In 2007, the Kansas Legislature, apparently decided that new legislation was not immediately necessary for the state to develop rules and regulations for the geologic storage of carbon in the state. It passed [HB 2419](#), mandating that the state develop regulations for CO₂ injection wells. The [regulations](#)⁴ were published in the Kansas Register on February 11, 2010, and became effective on February 25, 2010. The rules are largely based on the IOGCC model with the exception that Kansas will not take liability of the storage sites in the post-closure period.

2009 Regulation - Effective on February 25, 2010:

[Rules on Carbon Dioxide Storage Facilities](#)⁵

Louisiana

Summary: Legislation was passed in 2009 covering the general framework for geologic storage, pore space ownership, aggregation of storage rights, and long-term liability. As for regulations, the rule development process has not yet begun.

³ H.B. 3854, 96th Leg. (Ill.2009), available at: <http://groundwork.iogcc.org/sites/default/files/IL%20HB3854%2009-21-09.pdf>.

⁴ Kan. Admin. Regs. § 82-3-311a (2010); see Kan. Admin. Regs. §§ 82-3-1100 through 1120 (2010), available at: <http://groundwork.iogcc.org/sites/default/files/Kansas%20CO2%20Regulations.pdf>; see also Kan. Register. Vol. 29, No. 6 (2010).

⁵ Kan. Admin. Regs. §§ 82-3-1100 through 82-3-1119 (2010), available at: <http://groundwork.iogcc.org/sites/default/files/Kansas%20CO2%20Regulations.pdf>.

In 2009, the Louisiana Legislature passed HB 661, Act 517 addressing the geologic storage of CO₂. It is a comprehensive bill. The rule development process has not yet begun.

2009 Laws – Effective August 15, 2009:

[AN ACT relative to the storage of carbon dioxide](#)⁶

Montana

Summary: Legislation was passed in 2009 that will become effective upon a primacy delegation to the state by EPA. The legislation covers the general framework for geologic storage, pore space ownership, aggregation of storage rights, and long-term liability. As for regulations, development of rules is awaiting development by EPA of a final rule on CO₂ Geologic Sequestration Wells expected in late 2010 or early 2011.

Although the Montana Legislature’s Interim Committee on Energy and Telecommunications began in 2007 to examine the possibility of developing draft carbon storage legislation for introduction in 2009, the committee could not reach a consensus. It did, however, issue a comprehensive report. Notwithstanding this, several bills were introduced --- one bill on the House side (the governor’s bill) and three on the Senate side --- in the 2009 legislative session covering the issue. Senate Bill 498 ultimately passed and was signed into law by the governor on May 6, 2009. While some sections were effective on May 6, 2009, most elements of the law will not be effective until the state is granted primacy authority by the U.S. EPA under Rules for CO₂ Geologic Sequestration Wells currently being developed by EPA and not expected until late 2010 or early 2011.⁷

As concerns the promulgation of regulations, development of rules in Montana is expected to await the grant of primacy authority by EPA.⁸

2009 Laws – Effective May 6, 2009⁹:

[An act regulating carbon sequestration](#)¹⁰

⁶ H.R. 660 Act No. 517, Reg. Sess. (La. 2009). Enacted by the Legislature of the Louisiana as House Bill 661, Act 517, “AN ACT to enact R.S. 19:2(12) and Chapter 11 of Title 30 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 30:1101 through 1111, relative to the storage of carbon dioxide; to provide for expropriation; to provide for the duties and powers of the commissioner of conservation; to provide for definitions; to provide for public hearings; to provide for enforcement; to provide for compliance orders; to provide for penalties; to provide for certificates of public convenience and necessity; to provide for certificates of completion; to provide for liability; to provide for the Geologic Storage Trust Fund; to provide for fees; to provide for uses of the fund; to provide for accounting and reports of the fund; to provide for site-specific trust accounts; and to provide for related matters.” The bill’s effective date was August 15, 2009.

⁷ *Supra* note 3.

⁸ *Id.*

⁹ As noted in the text above, while some sections were effective on May 6, 2009, most elements of the law will not be effective until the state is granted primacy authority by the U.S. Environmental Protection. See notes 7 and 8.

North Dakota

Summary: Legislation was passed and became effective in 2009. The legislation covers the general framework for geologic storage, pore space ownership, aggregation of storage rights, and long-term liability. Regulations implementing the legislation became effective on April 1, 2010.

In early 2008, North Dakota briefly debated whether new legislation was needed for the geologic storage of carbon dioxide in the state. It was concluded that new legislation was needed and at the request of the North Dakota Industrial Commission (comprised of the Governor, the Attorney General, and the Agriculture Commissioner), a task force set to work drafting such legislation. The task force was made up of representatives of the state's major industrial sectors (coal mining, electric generation and transmission, and oil and natural gas), the trade associations for each industry, the University of North Dakota Energy & Environmental Research Center, the State Health Department, the State Mineral Resources Department and the Office of the Attorney General. Based on the work of the task force, the Industrial Commission, in advance of the 2009 legislative session, pre-filed two bills. One covered geologic storage (SB 2095) and the other pore space (SB 2139). Both bills were subsequently passed into law and signed by the governor on April 8, 2009. The bills were effective on July 1, 2009, and April 9, 2009, respectively. While the North Dakota legislation was clearly modeled on the IOGCC model statute, it had two additional elements that are worth noting. One feature of the geologic storage bill was its authorization of the commission to issue a determination as to the "amount of injected CO₂ stored in a reservoir that has been or is being used for an enhanced oil or gas recovery project."¹¹

It further states that the purpose in giving the commission the authority to determine "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."¹² In the pore space bill, the bill

¹⁰ S. 498, 61st Leg. (Mont. 2009). Enacted by the Legislature of the State of Montana as Senate Bill 498, approved on April 22, 2009 entitled "AN ACT REGULATING CARBON SEQUESTRATION; REQUIRING A PERMIT FOR A CARBON DIOXIDE INJECTION WELL; AUTHORIZING THE BOARD OF OIL AND GAS CONSERVATION TO REGULATE THE INJECTION OF CARBON DIOXIDE; AFFIRMING THE DOMINANCE OF A MINERAL ESTATE; ESTABLISHING FEES FOR ADMINISTERING A CARBON SEQUESTRATION PROGRAM AND LONG-TERM OVERSIGHT OF WELLS; REQUIRING NOTICE OF CARBON DIOXIDE INJECTION WELLS; REQUIRING THE BOARD TO SOLICIT AND CONSIDER COMMENTS FROM THE DEPARTMENT OF ENVIRONMENTAL QUALITY PRIOR TO ISSUING AN INJECTION PERMIT AND PRIOR TO ISSUING A CERTIFICATE OF COMPLETION; REQUIRING THE BOARD TO SOLICIT AND CONSIDER COMMENTS FROM THE DEPARTMENT OF ENVIRONMENTAL QUALITY PRIOR TO TRANSFERRING LIABILITY TO THE STATE; REQUIRING TESTING AFTER ISSUANCE OF A CERTIFICATE OF COMPLETION AND PRIOR TO TRANSFER OF LIABILITY; ALLOWING FOR THE TRANSFER OF TITLE TO SEQUESTERED CARBON DIOXIDE TO THE STATE AFTER BOARD CERTIFICATION; ALLOWING UNITIZATION FOR GEOLOGIC STORAGE RESERVOIRS; EXEMPTING A CARBON DIOXIDE INJECTION WELL FROM GROUND WATER PERMIT REQUIREMENTS; AMENDING SECTIONS 70-30-105, 75-5-103, 75-5-401, 77-3-430, 82-10-402, 82-11-101, 82-11-104, 82-11-111, 82-11-118, 82-11-122, 82-11-123, 82-11-127, 82-11-136, 82-11-137, 82-11-161, 82-11-163, 82-11-201, 82-11-204, 82-11-205, AND 82-11-214, MCA; AND PROVIDING EFFECTIVE DATES.

¹¹ N.D. Cent. Code § 38-22-23(1) (2009).

¹² N.D. Cent. Code § 38-22-23(2) (2009).

prohibited the severance of the title to pore space from the title to the surface of the real property overlying the store space.¹³

Concerning development of regulations for geologic storage of CO₂ in North Dakota, the North Dakota Industrial Commission --- using the IOGCC Model Rules and Regulations --- issued a proposed set of regulations on September 10, 2009, as part of a broader set of administrative rule changes. A public hearing was held on October 15, 2009, and based on comments received, changes were made in the document. On November 16, 2009, the commission gave its final approval to the regulations. On December 4, 2009, the Attorney General certified that statutory requirements for approval of the regulations by the commission had been met. After being sent to the Administrative Rules Committee, a joint committee of the North Dakota House and Senate, the regulations became final on April 1, 2010, when no action was taken by the committee. With these rules in effect, North Dakota becomes the first state with a complete and comprehensive legal and regulatory regime for the geologic storage of CO₂ in North America.¹⁴

2009 Laws - Effective July 1, 2009, and April 9, 2009, respectively:

[Relating to the geologic storage of carbon dioxide](#)¹⁵

[Relating to the ownership of subsurface pore space.](#)¹⁶

2010 Regulations - Effective April 1, 2010:

[Geologic Storage of Carbon Dioxide](#)¹⁷

¹³ N.D. Cent. Code § 47-31 (2009).

¹⁴ While Washington had legislation and rules two years earlier, it can be argued that the North Dakota regime is the more comprehensive of the two.

¹⁵ S. 2095, 61st Leg., 2009 Regular Sess. (N.D. 2009). *See also* Interstate Oil and Gas Compact Commission – Groundwork, North Dakota Senate Bill 2095, *available at*: <http://groundwork.iogcc.org/sites/default/files/North%20Dakota%20Senate%20Bill%20No.%202095%20Relating%20to%20the%20Geologic%20Storage%20of%20Carbon%20Dioxide.pdf>. Enacted by the Legislature of the State of North Dakota as Senate Bill 2095, to create and enact chapter 38-22 of the North Dakota Century Code, relating to the geologic storage of carbon dioxide; to repeal section 38-08-24 of the North Dakota Century Code, relating to priorities in permitting carbon dioxide geologic storage projects; to provide a penalty; and to provide a continuing appropriation. The bill's effective date was July 1, 2009.

¹⁶ S. 2139, 61st Leg., 2009 Regular Sess. (N.D. 2009). *See also* Interstate Oil and Gas Compact Commission – Groundwork, North Dakota Senate Bill 2139, *available at*: <http://groundwork.iogcc.org/sites/default/files/North%20Dakota%20Senate%20Bill%20No.%202139%20Relating%20to%20the%20Ownership%20of%20Subsurface%20Pore%20Space.pdf>. Enacted by the Legislature of the State of North Dakota as Senate Bill 2139, to create and enact a new chapter to title 47 of the North Dakota Century Code, relating to ownership of subsurface pore space; to provide for application; and to declare an emergency. The bill's effective date was April 9, 2009.

Ohio

Summary: Legislation providing the general framework for geologic storage of CO₂ will become effective on June 20, 2010. The legislation does not address aggregation of storage rights, long-term liability, or pore space ownership. A process for developing necessary regulations is expected to begin by summer 2010.

On March 31, 2010, the governor signed a major revision of the state's Oil and Gas Code. Initially proposed by the state's Department of Natural Resources (DNR), the revised code was designed, among other things, to accommodate and provide the general legislative framework necessary for the geologic storage of CO₂ in the state. The law became effective on June 30, 2010. It does not address aggregation of storage rights, long-term liability, or pore space ownership, although pore space ownership is well-established under Ohio law. Authority is provided in the legislation for rule-making.

2010 Laws – Effective June 30, 2010:

[Senate Bill 165](#)¹⁸ revises the definitions of “owner” and “brine” in the Oil and Gas Law, and applies the definition of “urbanized area” to the entire Oil and Gas Law. It also defines “well stimulation” or “stimulation of a well,” “material and substantial violation,” and “severer” in the Oil and Gas Law.¹⁹

Oklahoma

Summary: In 2009, the Oklahoma Legislature passed SB 610, which established the basic legal framework for CO₂ geologic storage. It did not address pore space, aggregation of storage rights, or long-term liability. No regulations under this framework have been established. It should be noted, however, that the Oklahoma Conservation Commission adopted rules governing the verification of carbon credits for CO₂ storage in 2009.

[Senate Bill 1765](#)²⁰ became law in 2008, establishing the Oklahoma Geologic Storage of Carbon Dioxide Task Force with a mandate to submit a report with legislative recommendations. The initial deadline for the report of December 1, 2008, was extended in 2009 and another extension is expected in 2010. Nonetheless, the task force produced a [report](#)²¹ in 2008. Several recommendations were incorporated

¹⁷ N.D. Admin. Code § 43-05-01 (2010); see also Interstate Oil and Gas Compact Commission – Groundwork, North Dakota Administrative Code § 43-05-01 available at: http://groundwork.iogcc.org/sites/default/files/NDCC38-22andNDAC43-05_04-2010.pdf at 8.

¹⁸ S.B. 165, 128th Gen. Ass. (2010), available at: <http://groundwork.iogcc.org/sites/default/files/SB%20165%202010.pdf>. The bill was effective upon signing by the Governor on March 31, 2010.

¹⁹ *Id.*

²⁰ S.B. 1765.51st Leg. (Okla. 2007), available at: <http://groundwork.iogcc.org/sites/default/files/OK%20SB1765%2010-9-09.pdf>.

²¹ Report of the Oklahoma Geologic Storage of Carbon Dioxide Task Force (2008), available at: <http://groundwork.iogcc.org/sites/default/files/OK%20Report%20of%20OK%20CO2%2010-09-09.pdf>

into [SB 610](#)²², which was signed into law on June 1, 2009, becoming effective the same date. This bill established a basic CO₂ regulatory framework for geologic storage in Oklahoma. While it did not address the issue of pore space ownership, aggregation of storage rights, or long-term liability, it did specify that if the state establishes a unitization scheme for CO₂ geologic storage in Oklahoma, jurisdiction will be with the Corporation Commission. It also addressed the ownership of CO₂. It should also be noted that the law as to pore space ownership in Oklahoma is well established and therefore a statute addressing the issue may not be necessary. No regulations have yet been promulgated under the statute.

It should also be noted that in March 2009, the Oklahoma Conservation Commission adopted permanent rules that provide a mechanism for the verification of the sequestration of carbon dioxide, both terrestrial and geologic (Title 155, Chapter 30).

2009 Laws – Effective June 1, 2009:

[Oklahoma Carbon Capture and Geologic Sequestration Act](#)²³

2009 Regulation - Effective on July 1, 2009:

[Carbon Sequestration Verification Program](#)²⁴

Texas

Summary: Legislation was passed in 2009 in three areas. One bill established incentives for carbon capture and geologic storage projects. Another covered offshore geologic storage. The third set forth the general framework for CO₂ geologic storage in Texas in formations above or below formations productive of oil and natural gas. The effective date for all three pieces of legislation was September 1, 2009. The legislation did not establish a general framework for storage in non-oil and natural gas producing parts of the state nor did it settle issues of pore space ownership, aggregation of storage rights, or long-term liability. As for regulations, the Texas Railroad Commission (RRC) was charged by the legislature with adopting geologic storage regulations consistent with eventual EPA rules for geologic storage and the Texas Commission on Environmental Quality (TCEQ) was tasked with developing standards and rules for such storage. The RRC is moving forward on approving its regulations with the goal of a final set of regulations by early summer 2010. The TCEQ is likewise engaged in a process to develop its rules.

²² S. 610, 52nd Leg. (Okla. 2009), available at::

<http://groundwork.ioqcc.org/sites/default/files/Oklahoma%20Senate%20Bill%20No.%20610%20Oklahoma%20Carbon%20Capture%20and%20Geologic%20Sequestration%20Act.pdf>. Enacted by the Legislature of the Oklahoma as Senate Bill 610, AN ACT relating to environment and natural resources creating the Oklahoma Carbon Capture and Geologic Sequestration Act. The bill was effective upon signing by the Governor on June 1, 2009.

²³ *Id.*

²⁴ Okla. Conservation Commission. Carbon Sequestration Verification Commission.

http://www.ok.gov/conservation/Agency_Divisions/Water_Quality_Division/WQ_Carbon_Sequestration/About/.

In 2009, the Texas Legislature passed three bills that addressed various aspects of carbon capture and geologic storage. The three bills were HB 469, relating to the establishment of incentives for the implementation of certain carbon capture and storage projects; HB 1796, relating to the development of offshore carbon geologic storage; and SB 1387, identifying regulatory jurisdiction for onshore carbon geologic storage and specifying requirements including permitting, financial assurance, monitoring and inspection of storage into formations productive of oil or gas, or brine formations above or below oil or gas formations. Under this latter bill, jurisdiction is vested in the RRC except for storage into non-oil and gas producing formations, which must be studied before further legislative action is taken.

The RRC was also tasked under SB 1387 with adopting geologic storage regulations consistent with eventual EPA rules for geologic storage of CO₂²⁵ in a reservoir that is initially or may be productive of oil, gas, or geothermal resources or a saline formation directly above or below that reservoir, and the TCEQ was tasked with developing standards and rules for an offshore deep subsurface geologic repository for the storage of anthropogenic carbon dioxide. SB 1796 also required the TCEQ, the RRC, and the Texas Public Utility Commission to participate in the federal government process for developing federal greenhouse gas reporting and registry requirements and required TCEQ to adopt those requirements by reference.

Concerning development of regulations under SB 1387, RRC staff prepared draft regulations for the consideration of the RRC on March 9, 2010. The proposed rules would take effect under title 16, chapter 5 of the Texas Administrative Code.²⁶ As of the date of this report, the proposed rules have yet to be finalized.

The TCEQ is likewise engaged in a process to develop its rules. Its rule will establish a process for the Executive Director of the TCEQ to make a statutorily required determination (under the Texas Water Code) before a permit can be issued by the RRC to an operator to store CO₂ in geologic formations. The determination relates to whether the conditions of the permit are necessarily protective of the fresh water resources in the state.

2009 Laws - Effective September 1, 2009:

[Relating to the establishment of incentives by this state for the implementation of certain projects to capture and sequester carbon dioxide that would otherwise be emitted into the atmosphere](#)²⁷

²⁵U.S. Environmental Protection Agency, Underground Injection Control Program – UIC Program Primacy, <http://www.epa.gov/safewater/uic/primacy.html>. States may apply for primacy to administer the UIC program in their states.

²⁶ R.R. Comm'n of Tex., *Proposed CCS Rules Creating Chapter 5 of Title 16 TAC*, available at: <http://www.beg.utexas.edu/gcc/download/prop-new-Ch5-carbon-dioxide.pdf>.

²⁷ H.R. 469, 81st Leg. (Tex. 2009), available at: <http://groundwork.iogcc.org/sites/default/files/Texas%20House%20Bill%20No.%20469%20Relating%20to%20the%20Establishment%20of%20Incentives.pdf>. Enacted by the Legislature of the State of Texas as House Bill 469 and approved on May 31, 2009, an act relating to the establishment of incentives by this state for the implementation of certain projects to capture and sequester carbon dioxide that would otherwise be emitted into the atmosphere. It amends

[Relating to the development of carbon dioxide capture and sequestration in this state \(Offshore\)](#)²⁸

[Relating to the implementation of projects involving the capture, injection, sequestration, or geologic storage of carbon dioxide](#)²⁹

Utah

Summary: No substantive legislation. No regulations.

Utah has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. However, in 2008, Utah passed and signed into law [SB 202](#)³⁰ which, among other things, mandated the development of rules pertaining to carbon capture and geologic storage by January 1, 2011. The law also requested recommendations as to the need for any specific legislation. The state has created a working group, which has commenced work. The working group has assigned responsibility for capture and transport issues to the Department of Environmental Quality and the storage issues to the Division of Oil, Gas, and Mining of the Department of Natural Resources. Release of any final storage rules likely will await completion by EPA of rules for CO₂ storage currently under development³¹ but not expected before 2011.

Washington

Summary: Legislation was passed and became effective in 2007 and two sets of rules were promulgated and became effective in 2008. The state also has received an application for a pilot study that proposes to inject CO₂ into basalt formations.

portions of the Texas Government Code, the Health and Safety Code, the Natural Resources Code, and the Tax Code, Tex. Tax Code Ann. It was effective on September 1, 2009.

²⁸ H.R. 1796, 81st Leg. (Tex. 2009), available at:

<http://groundwork.iogcc.org/sites/default/files/Texas%20House%20Bill%20No.%201796%20Relating%20to%20the%20Development%20of%20Carbon%20Dioxide%20Capture%20and%20Sequestration%20in%20Texas.pdf>. Enacted by the Legislature of the State of Texas as House Bill 1796 and approved by the House on May 31, 2009, and the Senate on June 1, 2009, relating to the development of carbon dioxide capture and sequestration in Texas. It amends portions of the Texas Health and Safety Code, the Tax Code, and the Transportation Code. It was effective on September 1, 2009.

²⁹ S. 1387, 81st Leg. (Tex. 2009), available at:

<http://groundwork.iogcc.org/sites/default/files/Texas%20Senate%20Bill%20No.%201387%20Relating%20to%20the%20Implementation%20of%20Projects%20Involving%20the%20capture,%20injection,%20sequestration,%20or%20Geologic%20storage%20of%20carbon%20dioxide.pdf>. Enacted by the Legislature of the State of Texas as Senate Bill 1387 and approved by the Senate on April 22, 2009, and the House on May 18, 2009, relating to the implementation of projects involving the capture, injection, sequestration, or geologic storage of carbon dioxide. It amends portions of the Texas Water Code and the Natural Resources Code.

³⁰ S.B. 202. 2008 General Sess. (Utah 2008), available at:

<http://groundwork.iogcc.org/sites/default/files/UT%20SB202%20%206-1-09.pdf>. Energy Resource and Carbon Initiative.

³¹ *Supra* note 3.

Washington holds the honor of being the first state off the mark with legislation and rules that address carbon capture and storage (CCS). Senate Bill 6001 was enacted and signed by the governor (with a partial veto) on May 3, 2007, and became effective on July 22, 2007. On June 19, 2008, two sets of rules to implement SB 6001 were promulgated: Geologic Sequestration rules including companion air quality regulations covering carbon dioxide emissions; and Final Underground Injection Control (UIC) rules³² for the geologic sequestration of CO₂. The rules were effective on July 20, 2008. The IOGCC model rules and the federal UIC standards were the models initially used. However, Washington's water quality laws required that the state address some aspects in a different way than was suggested by the IOGCC model rules. Washington's rules are similar to, but not the same as, published proposed federal rules. When federal rules³³ are final in 2010 or 2011 Washington will consider minor rule amendments to allow federal delegation of the state program. (For example, Washington's rules use class V wells for injection, but draft federal rules create a new class VI wells for carbon sequestration.)

Washington already has received an application for a pilot study that proposes to inject 1,000 metric tons of CO₂ into basalt formations of the Columbia River Basalt Group.

2007 Law - Effective on July 22, 2007

[An Act relating to mitigating the impact of climate change](#)³⁴

2007 Regulation - Effective on July 20, 2008

[Geologic Sequestration rules](#)³⁵

[UIC rules for the Geologic Sequestration of Carbon Dioxide](#)³⁶

³² *Supra* note 3.

³³ U.S. Environmental Protection Agency, Underground Injection Control Program – Geologic Sequestration of Carbon Dioxide, http://water.epa.gov/type/groundwater/uic/wells_sequestration.cfm. EPA is presently developing a rule under the UIC Program to cover CO₂ Geologic Sequestration Wells.

³⁴ S. 6001, 60th Leg., 2007 Regular Sess. (Wash. 2007), *available at*: <http://groundwork.iogcc.org/sites/default/files/WA%20SB6001%20%206-30-09.pdf>. *See also* Wash. Rev. Code § 80.80 (2007) *available at*: <http://groundwork.iogcc.org/sites/default/files/WA%20Rev%20Code%2080.80.pdf>. Enacted by the Legislature of the State of Washington as Senate Bill 6001, delivered to the Governor on April 20, 2007 and signed by the Governor with a partial veto on May 4, 2007 creating Chapter 307, 2007 Laws PV. Although the legislature in 2009 made modifications to Chapter 80.80, it did not revise the requirements for geologic sequestration. The modifications that were made related to the definition of power plant and the treatment of long term financial commitments and unspecified sources of power.

³⁵ Wash.Admin.Code § 173-407-010 thru 173-407-080 (2008), *available at*: <http://groundwork.iogcc.org/sites/default/files/wac173407.pdf>. (provisions relating to geologic sequestration): *see also* The State of Wash. Dep't of Ecology – Concise Explanatory Statement and Responsiveness Summary: Ch 173-407 and Ch. 173-218 WAC, <http://www.ecy.wa.gov/biblio/0802017.html>.

³⁶ Wash.Admin.Code § 173-218-010 thru 173-218-130 (1984), *available at*: <http://groundwork.iogcc.org/sites/default/files/wac173218.pdf>.

West Virginia

Summary: No substantive legislation. No regulations.

West Virginia has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. However, at the governor's request the legislature in 2009 took up the issue of carbon storage. On April 11, 2009, a bill was passed ([HB 2860](#))³⁷ and signed. The legislation mandates creation of a carbon dioxide sequestration working group and the promulgation of legislative rules to implement the provisions of the statute. The statute also requires the working group to prepare an interim report for the legislature by July 1, 2010, and a final report by July 1, 2011, that includes, among other things, any recommendations for legislation addressing ownership of pore space. The West Virginia Carbon Dioxide Working Group issued the interim report on July 1, 2010.³⁸ There is some possibility that the working group may decide to speed up its work to complete the report earlier than July 2011. This could make legislative consideration of a sequestration bill possible in 2011.

In 2009, the legislature also passed [SB 507](#)³⁹ that amended and re-enacted a provision relating to the West Virginia Clean Coal Technology Council and mandated it to prepare a study of carbon capture and control.

Wyoming

Summary: Legislation was passed and became effective in 2008 and again in 2009. The legislation covers the general framework for geologic storage, pore space ownership, and aggregation of storage rights. Unaddressed is financial assurance, which the legislature is expected to consider in 2010. Regulations covering both unitization and geologic sequestration (except financial assurance) are being developed with the likelihood of approved rules being in place by the end of 2010.

³⁷H.B. 2860. 79th Leg.; 2d Sess. (W.Va. 2009), available at: <http://groundwork.iogcc.org/sites/default/files/WV%20HB2860%207-8-09.pdf>. AN ACT to amend and reenact §22-11-4, §22-11-22, §22-11-24 and §22-11-25 of the Code of West Virginia, 1931, as amended; and to amend said code by adding thereto a new article, designated §22-11A-1, §22-11A-2, §22-11A-3, §22-11A-4, §22-11A-5, §22-11A-6, §22-11A-7, §22-11A-8 and §22-11A-9, all relating to regulating the sequestration and storage of carbon dioxide; providing for powers and duties of the Department of Environmental Protection; providing for civil penalties and injunctive relief; providing for criminal penalties; providing for civil liability; setting forth legislative findings; defining terms; specifying powers and duties; specifying carbon dioxide permitting requirements; establishing a working group to study and make recommendations regarding carbon dioxide sequestration; and authorizing the promulgation of legislative rules and cooperative agreements.

³⁸W. Va. Carbon Dioxide Working Group, *Preliminary Report* (2010).

³⁹S.B. 507. 79th Leg., 2d Sess. (W.Va. 2009), available at: <http://groundwork.iogcc.org/sites/default/files/WV%20SB507%207-20-09.pdf>. AN ACT to amend and re-enact §5C-2-5 of the Code of West Virginia, 1931, as amended, relating to powers and duties of the West Virginia Clean Coal Technology Council; requiring a study of carbon capture and control; and quarterly reports to the Joint Committee on Government and Finance.

In 2008, a mere four months after the release of the IOGCC guidance document, the Wyoming Legislature passed two bills that were signed into law by the governor. The following year, three additional bills were passed and signed into law. In 2010, a bill has been introduced (HB 17)⁴⁰ that is supported by the governor and which would address issues of financial assurance in the operational and post-operations phases. The bill is drafted with the understanding that the federal government will assume financial responsibility post-closure.

Concerning unitization, on August 16, 2010, by his signature, Governor Dave Freudenthal approved as adopted on June 8, 2010. The approved rules were filed on August 17, 2010, with the Secretary of State. With the rules approved and filed, compliance with these rules was effective September 15, 2010. A [memo](#)⁴¹ was sent to owners and operators regarding compliance with the new rules. The August 24th memo provides clarification specific to questions received during the Wyoming Oil and Gas Conservation Commission ([WOGCC](#))'s public comment meeting held on July 27th and 28th.

On a second front, broader carbon sequestration rules developed by the state's Department of Environmental Quality likewise are moving forward through a mandatory review process. These latter rules contain only a placeholder for financial assurance rules. The development of and mandatory review process for financial assurance rules will commence if and when a financial assurance bill passes the legislature and is signed into law by the governor.

2008 Laws - Effective on July 1, 2008:

[Ownership of Subsurface Pore Space](#)⁴²

[Carbon Capture and Sequestration.](#)⁴³

2009 Laws – Effective July 1, 2009:

[Ownership of Pore Space-Dominance of Mineral Estate](#)⁴⁴

⁴⁰ H.B. 17, 60th Leg., Budget Sess. (2010); see Wyo. State. Ann. § 35-11-318 (2010), available at http://groundwork.iogcc.org/sites/default/files/HB0017_enrolled%20Act%20No.%2026.pdf.

⁴¹ Wyoming Oil and Gas Conservation Commission (August 24, 2010). Memorandum regarding Adoption of WOGCC Rules & Regulations, Clarifications.

⁴² H.R. 89, 59th Leg., 2008 Budget Sess. (Wyo. 2008). See Wyo. Stat. Ann § 34-1-152 (2009); see also Wyo. Stat. Ann. § 34-1-202(e) (2009). Enacted by the Legislature of the State of Wyoming as House Bill 89, approved on March 4, 2008, creating W.S. 34-1-152 and amending W.S. 34-1-202(e). The bill's effective date was July 1, 2008.

⁴³ H.R. 90, 59th Leg., 2008 Budget Sess. (Wyo. 2008). See Wyo. Stat. Ann § 30-5-501 (2008); see Wyo. Stat. Ann § 35-11-313 (2008); see Wyo. Stat. Ann § 35-11-103 (c) (2008). Enacted by the Legislature of the State of Wyoming as House Bill 90, approved March 4, 2008, creating W.S. 30-5-501 and 35-11-313 and amending W.S. 35-11-103(c). The bill's effective date was July 1, 2008.

⁴⁴ H.R. 57, 60th Leg., 2009 Gen. Sess. (Wyo. 2009). See Wyo. Stat. Ann. § 34-1-152(e) (2009). Enacted by the Legislature of the State of Wyoming as House Bill 57, approved on February 26, 2009, amending W.S. 34-1-152 (e). The bill's effective date was July 1, 2009.

[Responsibilities of Injectors and Pore Space Owners](#)⁴⁵

[Sequestration Site Unitization](#)⁴⁶

2010 Regulations - Effective August 16, 2010

[Chapter 3, Operation Rules, Drilling Rules](#)⁴⁷

B. States with CCGS Legislative/Regulatory Activity

Alaska

Summary: No legislation. No regulations.

Alaska has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. It is, however, in the final stages of completing a report that examines a variety of issues related to carbon capture and storage. At the request of the governor, the report is being undertaken by the [Alaska Subcabinet for Climate Change](#)⁴⁸. It is likely to conclude that no new laws or regulations are needed for CO₂ storage in conjunction with EOR but that legislation and regulations would likely be needed for non-EOR CO₂ geologic storage. The report is expected to be completed by September of 2010 and could include recommendations for consideration by the state legislature in 2011.

California

Summary: No substantive legislation. No regulations.

California has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. In 2006, California passed [HB 1925](#)⁴⁹ which mandated a report containing recommendations for how the state can develop parameters to accelerate the adoption of geologic sequestration strategies

⁴⁵ H.R. 58, 60th Leg., 2009 Gen. Sess. (2009). See Wyo. Stat. Ann § 34-1-153 (2009). Enacted by the Legislature of the State of Wyoming as House Bill 58, approved on February 26, 2009, creating W.S. 34-1-153. The bill's effective date was July 1, 2009.

⁴⁶ H.R. 80, 60th Leg., 2009 Gen. Sess. (2009); see Wyo. Stat. Ann. §§ 35-11-314 through 317; see Wyo. Stat. Ann. § 30-5-104(d) (2009); see Wyo. Stat. Ann. § 35-11-313(f) and (ii)(F) (2009). Enacted by the Legislature of the State of Wyoming as House Bill 80, approved on February 27, 2009 creating W.S. 35-11-314 through 35-11-317; amending W.S. 30-5-104(d); and amending W.S. 35-11-313(f)(intro) and (ii)(F). The bill's effective date was July 1, 2009.

⁴⁷ Chapter 3, Operation Rules, Drilling Rules (WOGCC) as adopted August 16, 2010.

⁴⁸ Climate Change in Alaska, <http://www.climatechange.alaska.gov/>. This site documents the work of the Climate Change Sub-Cabinet to date. The process consisted of different Advisory groups, which in turn broke down into several Technical Working Groups (TWG's). Reports are completed and available from this web-site for Adaption, Mitigation, Immediate Action, and Research needs.

⁴⁹ A.B. 1925, 2006 Gen. Ass. (Ca. 2006), available at: http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_1901-1950/ab_1925_bill_20060926_chaptered.html.

for the long-term management of industrial carbon dioxide. That [report](#) was completed in November 2007.⁵⁰ Legislation is likely to await completion of a WestCarb pilot project in the state.

Colorado

Summary: No legislation. No regulations.

Colorado has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. However, in March 2010, the governor asked the state's Department of Natural Resources to convene a task force to examine the issues surrounding carbon capture and geologic storage. In response the state has created a 13-member Carbon Capture and Sequestration Task Force.⁵¹ A goal of the task force is developing omnibus legislation for the 2011 General Assembly. The task force is made up of lawmakers, agency officials, conservation groups, and representatives of the utility, energy, and cement industries. The task force meets monthly to discuss and assess ways in which legal and regulatory challenges to geologic sequestration might be addressed.

Idaho

Summary: No legislation. No regulations.

Idaho has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. The state has, however, under the direction of the governor, established the [Idaho Strategic Energy Alliance](#).⁵² The Alliance consists of approximately a dozen issue-oriented volunteer task forces. The task force with responsibility for carbon sequestration, among other things, is the Carbon Issues Task Force.

Indiana

Summary: No legislation. No regulations.

Indiana has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. Two bills relating to geologic storage and transportation were introduced in the 2010 legislative session. One bill, SB115⁵³, addressed eminent domain for carbon dioxide pipelines in the state. The other, SB211⁵⁴, addressed broader issues pertaining to CO₂ storage and transportation in the state.

⁵⁰ California Energy Commission, [Geologic Carbon Sequestration Strategies for California: Report to the Legislature \(2007\)](#), available at:

<http://groundwork.iogcc.org/sites/default/files/CA%20Report%20CO2%20strategies%206-30-09.pdf>.

⁵¹ Colo. Dep't of Natural Res., Carbon Capture and Sequestration Task Force. <http://dnr.state.co.us>.

⁵² Idaho Office of Energy Res., Idaho Strategic Energy Alliance, <http://www.energy.idaho.gov/energyalliance/>.

⁵³ S.B.115.116th Gen. Assembly. 2d Reg. Sess. (Ind. 2010), available at: <http://groundwork.iogcc.org/topics-index/carbon-sequestration/legislation/indiana-sb-115-eminent-doman-for-carbon-dioxide-pipeli>.

⁵⁴ S.B.211.116th Gen. Assembly 2d Reg. Sess. (Ind. 2010), available at: <http://groundwork.iogcc.org/topics-index/carbon-sequestration/legislation/indiana-sb-115-eminent-doman-for-carbon-dioxide-pipeli>.

Neither was passed into law. Prospects are good that Indiana will take up similar legislation again in 2011.

Kentucky

Summary: *No legislation. No regulations.*

Kentucky has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. However, a bill, [HB 491](#)⁵⁵, was introduced in February 2010 in the Kentucky Legislature. Otherwise, Kentucky is the process of seeking primacy for UIC-Class II injection wells, currently being regulated in the state through the U.S. EPA Region IV Office in Atlanta.

Michigan

Summary: *No legislation. No regulations.*

Michigan has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. In 2009, two CO₂ geologic storage bills were informally circulated, one of which was significantly influenced by the IOGCC model legislation. However, no legislation was passed. A CO₂ geologic storage bill may be introduced in 2010.

New Mexico

Summary: *No legislation. No regulations.*

New Mexico has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. In late 2008, within 3 months of the release of the IOGCC guidance document, New Mexico developed and released a comprehensive [Blueprint for the Regulation of Geologic Sequestration of Carbon Dioxide in New Mexico](#). However, the New Mexico Legislature did not take up the issue. In 2009, both a comprehensive geologic storage bill and a pore space bill were introduced but neither became law. The storage bill failed to make it out of committee and the pore space bill, although passed by the Senate, failed to be acted upon by the House prior to adjournment. In 2010 a pore space bill was introduced with the support of the governor. However, it did not become law prior to adjournment.

⁵⁵ H.B. 491, 10th Regular Sess. (Ky. 2010), available at: <http://www.lrc.ky.gov/record/10RS/HB491.htm>. AN ACT relating to carbon management and making an appropriation therefore Create new sections of KRS Chapter 353 declaring carbon dioxide management and storage to be important goals; declare certain geologic strata to be the property of the Commonwealth; direct the Division of Oil and Gas Conservation to develop a regulatory plan for development of geologic carbon dioxide storage including condemnation powers; provide minimum requirements for permitting; create an assessment against carbon dioxide generators per ton of carbon dioxide stored; direct the secretary of the Environmental and Public Protection Cabinet to negotiate with bordering states to resolve issues of geologic carbon storage; create the Kentucky Carbon Storage Authority to take ownership of closed and stable carbon storage facilities; create the Kentucky carbon storage fund for management and liability of closed carbon storage facilities; create mechanism for assessment fee to be adjusted.

North Carolina

Summary: No legislation. No regulations.

North Carolina has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. Although not part of a formal process, the state has begun to look into the potential for geologic CO₂ storage and the corresponding need for a legal and regulatory infrastructure.

Pennsylvania

Summary: No legislation. No regulations.

Pennsylvania has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. Legislation was introduced in the 2010 legislative session in the form of [HB 80](#)⁵⁶. This legislation has the support of the governor and the secretary of the Department of Environmental Protection (DEP).

Virginia

Summary: No legislation. No regulations.

Virginia has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. A bill entitled “Geologic Storage of Carbon Dioxide”, SB247⁵⁷, was introduced in January 2010 in the Senate. It was referred to the Committee on Agriculture, Conservation and Natural Resources, which voted against moving the bill forward. It did, however, ask that the [Virginia Commission on Coal and Energy](#)⁵⁸ study the issue further and report back with the goal of again considering a CO₂ geologic storage bill in 2011.

C. States with Little or No Legislative/Regulatory Activities

Alabama

Summary: No legislation. No regulations.

Alabama has not yet enacted legislation pertaining to the geologic storage of CO₂.

⁵⁶TH.B.80.2009 Sess (Pa.2009), available at:

<http://www.legis.state.pa.us/cfdocs/billinfo/billinfo.cfm?year=2009&sind=0&body=H&type=B&BN=0080>. An Act amending the act of November 30, 2004 (P.L.1672, No.213), known as the Alternative Energy Portfolio Standards Act, further providing for definitions and for alternative energy portfolio standards; and providing for sequestration facility permitting and for title to carbon dioxide, immunity and transfer of liability; establishing the Carbon Dioxide Indemnification Fund; providing for carbon dioxide sequestration facility and transportation pipeline on Commonwealth State forest lands; and providing for application of the Public Utility Code to transporters of carbon dioxide.

⁵⁷ S.B.247.2010 Regular Sess. (Va.2010).

⁵⁸ Va. Commission on Coal and Energy, <http://dls.state.va.us/CEC.HTM>.

Arkansas

Summary: No legislation. No regulations.

Arkansas has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. The next opportunity for consideration of geologic storage legislation will be January 2011.

Arizona

Summary: No legislation. No regulations.

Arizona has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. The state's Oil and Gas Conservation Commission does have rules regarding the use of CO₂ for EOR. Arizona was also the site of a [West Coast Regional Carbon Sequestration Partnership](#) (WestCarb)⁵⁹ pilot project where a CO₂ test well was drilled but no CO₂ was ever injected. As of now, the state is waiting to see what the national trend will be before taking steps on the development of legislation and rules regarding CO₂ geological storage.

Connecticut

Summary: No legislation. No regulations.

Connecticut has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. The focus in Connecticut to date has been on terrestrial sequestration.

Delaware

Summary: No legislation. No regulations.

Delaware has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Florida

Summary: No legislation. No regulations.

Florida has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Georgia

Summary: No legislation. No regulations.

⁵⁹ West Coast Regional Carbon Sequestration Partnership, <http://www.westcarb.org/>.

Georgia has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. One relevant factor is that there is apparently limited potential for CO₂ geologic storage in the state.

Hawaii

Summary: No legislation. No regulations.

Hawaii has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Iowa

Summary: No legislation. No regulations.

Iowa has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. Although 80% of Iowa's electric generation comes from coal, the state has not issued any laws or rules to regulate emissions from coal-fired plants in the state. In 2007, Iowa established the [Iowa Climate Change Advisory Council](#)⁶⁰ with a charge to identify policies and strategies for the state to respond to the challenge of global climate change. In December of 2008, the council released its Final Report⁶¹.

Maine

Summary: No legislation. No regulations.

Maine has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. In accordance with Maine statute⁶², the Maine Department of Environmental Protection is currently developing emission standards for CO₂ from coal gasification facilities. Maine considers CCS to be a possible control option under a BACT analysis but not an emission standard.

Maryland

Summary: No legislation. No regulations.

Maryland has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Massachusetts

Summary: No legislation. No regulations.

⁶⁰ Iowa Climate Change Advisory Council, <http://www.iaclimatechange.us/>.

⁶¹ Iowa Climate Change Advisory Council, ICCAC Final Report (2008), available at: <http://www.iaclimatechange.us/capag.cfm>.

Massachusetts has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. The state's private sector and the Massachusetts Institute of Technology are, however, actively engaged in researching the potential for CCS in the state. Once viable technologies are identified through this and other research the state would then look to the development of a comprehensive CCS legal regime.

Minnesota

Summary: No legislation. No regulations.

Minnesota has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. It is, however, an active member of the Midwest Governor's Association, which has studied the development of CCS rules, regulations, and infrastructure.

Mississippi

Summary: No legislation. No regulations.

Mississippi has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Missouri

Summary: No legislation. No regulations.

Missouri has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Nebraska

Summary: No legislation. No regulations.

Nebraska has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Nevada

Summary: No legislation. No regulations.

Nevada has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. However, the Nevada Bureau of Mines and Geology has completed two reports that examine the potential for geologic storage of CO₂. One [report](#)⁶³ takes a broad look at the potential while the [other](#)⁶⁴

⁶³ Preliminary Assessment of the Potential for Carbon Dioxide Disposal by Sequestration in Geological Settings in Nevada, Nevada Bureau of Mines and Geology, Report 51 (2005), available at: <http://www.nbmgs.unr.edu/dox/r51.pdf>.

focuses on the EOR-related potential. The Nevada Legislature meets only every two years and the next available opportunity for consideration of geologic storage legislation would be February – May 2011.

New Hampshire

Summary: *No legislation. No regulations.*

New Hampshire has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

New Jersey

Summary: *No legislation. No regulations.*

New Jersey has not yet enacted legislation or promulgated regulations specifically governing geological CO₂ storage. Existing state regulations regarding well drilling, air permitting, land use permitting, and pipeline-related issues would apply to any proposed CCS project.

New Jersey recently joined the Midwest Regional Carbon Sequestration Partnership, and is currently conducting an assessment of geological carbon sequestration potential in New Jersey and the adjacent offshore region. The state has not taken a policy position in support of or in opposition to CCS; the statewide assessment is a scientific study for research purposes.

New York

Summary: *No legislation. No regulations.*

New York has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. Project specific legislation⁶⁵ was introduced in June 2009 by Governor Paterson (Program Bill #45). However, the legislation did not pass and the project is no longer active.

Oregon

Summary: *No legislation. No regulations.*

⁶⁴ Assessment of the Potential for Carbon Dioxide Sequestration with Enhanced Oil Recovery in Nevada, Nevada Bureau of Mines and Geology Open-File Report 07-7 (2007), available at: <http://www.nbmge.unr.edu/dox/of077/of077.pdf>.

⁶⁵ A.08802, 2009-2010 Regular Sess. (N.Y. 2009), available at: http://assembly.state.ny.us/leg/?default_fld=&bn=A08802%09%Summary=Y&Text=Y. AN ACT to amend the public service law, in relation to a pilot program to enable the capture and storage of carbon dioxide; and to enact the "carbon capture and sequestration act." See also S. 53303, 4th Extraordinary Sess., (N.Y. 2009), available at: http://www.assembly.state.ny.us/leg/?default_fld=&bn=S53303%09%09%09&Summary=Y&Text=Y. AN ACT to amend the public service law, in relation to a pilot program to enable the capture and storage of carbon dioxide; and to enact the "carbon capture and sequestration act."

Oregon has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. It has, however, talked about adopting the Rules for CO₂ Geologic Sequestration Wells once the rules currently being developed by EPA are complete.⁶⁶ While not a member of any of the geologic sequestration-focused DOE Regional Carbon Sequestration Partnerships, Oregon will be reporting to the United States Geological Service (USGS) on the state's geologic potential for CO₂ storage. It does not appear that Oregon has much potential for conventional CO₂ storage. Like Washington, the greatest potential for CO₂ storage in the state would appear to be in deep basalt formations although there is not much research going into this possibility at the moment. Additionally, Oregon has only one coal-fired power plant, limiting the state's need for CO₂ geologic storage.

Rhode Island

Summary: *No legislation. No regulations.*

Rhode Island has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

South Carolina

Summary: *No legislation. No regulations.*

South Carolina has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

South Dakota

Summary: *No legislation. No regulations.*

South Dakota has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Tennessee

Summary: *No legislation. No regulations.*

Tennessee has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

Vermont

Summary: *No legislation. No regulations.*

Vermont has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

⁶⁶ *Supra* note 3.

Wisconsin

Summary: No legislation. No regulations.

Wisconsin has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. Additionally, there is no pending legislation or regulations. The Wisconsin Public Service Commission has, however, commissioned a report on the potential for geologic storage of CO₂ entitled: [An Investigation to Explore the Potential for Geologic Sequestration of Carbon Dioxide Produced by Wisconsin's Electricity Generation Fleet](#).⁶⁷ The report is in a public comment stage with the report itself not yet finalized.

D. Provincial Summaries

Alberta

Summary: No legislation. No regulations.

Alberta has not yet enacted specific legislation or promulgated regulations pertaining to the geologic storage of CO₂. The plan is to have specific legislation drafted for consideration in the fall. Regulations will be developed thereafter. On June 29, 2010 the Alberta [Energy Resources Conservation Board](#) issued Bulletin 22-2010⁶⁸ informing readers of the existing processes in place for applications for the development and operation of carbon capture and storage and acid gas injection projects in Alberta.

British Columbia

Summary: No new legislation. No new regulations.

British Columbia has legislation and regulations in place governing storage reservoir rights, underground storage, and disposal relating to oil and natural gas operations. The province is in the process of creating a regulation listing prescribed substances that will allow any desired substances, including carbon dioxide from any source, to be disposed of or stored in underground storage reservoir rights.

Newfoundland and Labrador

Summary: No legislation. No regulations.

Newfoundland and Labrador has not enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. As a large exporter of hydroelectric power, Newfoundland and Labrador produces very little CO₂ and therefore has little or no need to develop CO₂ geologic storage sites. The province is also home to a relatively young oil and natural gas industry, mostly offshore. As a

⁶⁷ Wisconsin Public Service Commission, An Investigation to Explore the Potential for Geologic Sequestration of Carbon Dioxide Produced by Wisconsin's Electricity Generation Fleet (2010), available at: http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=127780.

⁶⁸ Energy Res. Conservation Bd., Bulletin 2010-22 (2010), available at: <http://groundwork.iogcc.org/sites/default/files/bulletin-2010-22.pdf>.

consequence, the province's focus has been on developing and managing this new resource. For these and other reasons there are no plans at the present for additional legislation or regulations to govern geologic storage of CO₂.

Nova Scotia

Summary: *No legislation. No regulations.*

Nova Scotia has not enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂. It would appear that the only significant potential for CO₂ geologic storage in Nova Scotia would be more than 100 miles offshore. It is probable that any such storage would require additional legislation and regulations. At present, there are no plans for additional legislation or regulations.

Saskatchewan

Summary: *No legislation. No regulations. However, new legislation and regulations may not be necessary in Saskatchewan other than for clarification purposes. One interpretation is that the existing legal framework in the province already covers the general framework for geologic storage, pore space ownership, aggregation of storage rights, and long-term liability.*

Saskatchewan has not yet enacted legislation or promulgated regulations pertaining specifically to the geologic storage of CO₂. As in most states and provinces, Saskatchewan's existing laws and regulations provide the legal and regulatory framework for EOR-related CO₂ storage and the injection or deep disposal of other substances in the province. Saskatchewan's Weyburn project, making use of anthropogenic CO₂ originating in North Dakota, has been in operation for 10 years. Concerning non-EOR CO₂ storage, the province's existing laws and regulations⁶⁹ may be adequate, and no additional legislation may be necessary other than for clarification purposes.

Yukon

Summary: *No legislation. No regulations.*

Yukon has not yet enacted legislation or promulgated regulations pertaining to the geologic storage of CO₂.

⁶⁹ Government. of Sask. Energy and Resources, <http://www.ir.gov.sk.ca/oilgas>.