

Carbon Sequestration

This Act creates a regulatory scheme for geologic CO₂ storage. It directs the state department of environmental quality (DEQ) to develop standards for regulating long-term, geologic storage of carbon dioxide (CO₂) in the state. The Act provides a list of specific information that is required in permit applications for CO₂ storage injection wells. It allows the DEQ to issue permits for pilot-scale CO₂ sequestration and storage projects under current rules and regulations. It also requires the State Oil and Gas Supervisor, State Geologist and Director of DEQ to convene a working group to develop an appropriate bonding procedure and provides a \$250,000 appropriation for the working group.

Submitted as:
Wyoming
Chapter 30 of 2008
Status: Enacted into law in 2008.

Suggested State Legislation

(Title, enacting clause, etc.)

1 Section 1. [*Short Title.*] This Act shall be cited as “An Act Relating to Carbon
2 Sequestration.”

3
4 Section 2. [*Definitions.*]

5 (A) [As used in this Act, these are] [specific definitions applying to water quality]:

6 (1) “Geologic sequestration” means the injection of carbon dioxide and
7 associated constituents into subsurface geologic formations intended to prevent its release into
8 the atmosphere.

9 (2) “Geologic sequestration site” means the underground geologic formations
10 where the carbon dioxide is intended to be stored.

11 (3) “Geologic sequestration facilities” means the surface equipment used for
12 transport, storage and injection of carbon dioxide.

13
14 Section 3. [*Carbon Sequestration; Permit Requirements.*]

15 (A) The geologic sequestration of carbon dioxide is prohibited unless authorized by a
16 permit issued by the [department].

17 (B) The injection of carbon dioxide for purposes of a project for enhanced recovery of oil
18 or other minerals approved by the [state oil and gas conservation commission] shall not be
19 subject to the provisions of this Act.

20 (C) If an oil and gas operator converts to geologic sequestration upon the cessation of oil
21 and gas recovery operations, then regulation of the geologic sequestration facility and the
22 geologic sequestration site shall be transferred to the [department]. If the oil and gas operator
23 does not convert to geologic sequestration, the wells shall be plugged and abandoned according
24 to the rules of the [state oil and gas conservation commission].

25 (D) Temporary time limited permits for pilot scale testing of technologies for geologic
26 sequestration shall be issued by the [department] based upon current rules and regulations.

27 (E) Permit requirements for geologic sequestration of carbon dioxide shall be as defined
28 by [department] rules.

29 (F) The [administrator of the water quality division of the department of environmental
30 quality], after receiving public comment and after consultation with the [state geologist] and the
31 [advisory board created under this Act], shall recommend to the [director] rules, regulations and
32 standards for:

33 (1) The creation of subclasses of wells within the existing Underground Injection
34 Control (UIC) program administered by the United States Environmental Protection Agency
35 under Part C of the Safe Drinking Water Act to protect human health, safety and the environment
36 and allow for the permitting of the geologic sequestration of carbon dioxide;

37 (2) Requirements for the content of applications for geologic sequestration
38 permits. Such applications shall include:

39 (a) A description of the general geology of the area to be affected by the
40 injection of carbon dioxide including geochemistry, structure and faulting, fracturing and seals,
41 stratigraphy and lithology including petrophysical attributes;

42 (b) A characterization of the injection zone and aquifers above and below
43 the injection zone which may be affected including applicable pressure and fluid chemistry data
44 to describe the projected effects of injection activities;

45 (c) The identification of all other drill holes and operating wells that exist
46 within and adjacent to the proposed sequestration site;

47 (d) An assessment of the impact to fluid resources, on subsurface
48 structures and the surface of lands that may reasonably be expected to be impacted and the
49 measures required to mitigate such impacts;

50 (e) Plans and procedures for environmental surveillance and excursion
51 detection, prevention and control programs. For purposes of this section, “excursion” shall mean
52 the detection of migrating carbon dioxide at or beyond the boundary of the geologic
53 sequestration site;

54 (f) A site and facilities description, including a description of the proposed
55 geologic sequestration facilities and documentation sufficient to demonstrate that the applicant
56 has all legal rights, including but not limited to the right to surface use, necessary to sequester
57 carbon dioxide and associated constituents into the proposed geologic sequestration site;

58 (g) Proof that the proposed injection wells are designed at a minimum to
59 the construction standards set forth by the [department] and the [state oil and gas conservation
60 commission];

61 (h) A plan for periodic mechanical integrity testing of all wells;

62 (i) A monitoring plan to assess the migration of the injected carbon
63 dioxide and to insure the retention of the carbon dioxide in the geologic sequestration site;

64 (j) Proof of bonding or financial assurance to ensure that geologic
65 sequestration sites and facilities will be constructed, operated and closed in accordance with the
66 purposes and provisions of this Act and the rules and regulations promulgated pursuant to this
67 Act;

68 (k) A detailed plan for post-closure monitoring, verification, maintenance
69 and mitigation;

70 (l) Proof of notice to surface owners, mineral claimants, mineral owners,
71 lessees and other owners of record of subsurface interests as to the contents of such notice.
72 Notice requirements shall at a minimum require:

73 (i) The publishing of notice of the application in a newspaper of
74 general circulation in each county of the proposed operation at weekly intervals for [four (4)]
75 consecutive weeks;

76 (ii) A copy of the notice shall also be mailed to all surface owners,
77 mineral claimants, mineral owners, lessees and other owners of record of subsurface interests
78 which are located within [one (1) mile] of the proposed boundary of the geologic sequestration
79 site.

80 (3) Requirements for the operator to provide immediate verbal notice to the
81 [department] of any excursion after the excursion is discovered, followed by written notice to all
82 surface owners, mineral claimants, mineral owners, lessees and other owners of record of
83 subsurface interests within [thirty (30)] days of when the excursion is discovered;

84 (4) Procedures for the termination or modification of any applicable Underground
85 Injection Control (UIC) permit issued under Part C of the Safe Drinking Water Act if an
86 excursion cannot be controlled or mitigated;

87 (5) Such other conditions and requirements as necessary to carry out this section.

88 (G) As soon as practical and prior to [September 30, 2009], the [state oil and gas
89 supervisor, the state geologist and the director] shall convene a [working group] for the purpose
90 of developing an appropriate bonding procedure and other financial assurance methods to assure
91 that adequate financial resources are provided to pay for any mitigation or reclamation costs that
92 the state may incur as a result of default by the permit holder. The bond or other financial
93 assurance shall be required during the operating life of the sequestration project and throughout
94 the post-closure care period in order to abate or remedy any violation of a permit, standard or
95 rule established under the provisions of this Act. The [working group] shall recommend to the
96 [joint minerals, business and economic development and joint judiciary interim committees], on
97 or before [September 30, 2009], the duration of the post-closure care period. At a minimum, the
98 bond or other financial assurance shall provide assurance for closure and reclamation costs, post-
99 closure inspection and maintenance costs and environmental monitoring, verification and control
100 costs.

101 (H) At the time a permit application is filed, an applicant shall pay a fee to be determined
102 by the [director] based upon the estimated costs of reviewing, evaluating, processing, serving
103 notice of an application and holding any hearings. The fee shall be credited to a separate account
104 and shall be used by the [division] as required to complete the tasks necessary to process, publish
105 and reach a decision on the permit application. Unused fees shall be returned to the applicant.

106 (I) The [director] shall recommend to the [council] any changes that may be required to
107 provide consistency and equivalency between the rules or regulations promulgated under this
108 section and any promulgated for the regulation of carbon dioxide sequestration by the United
109 States Environmental Protection Agency.

110 (J) The [state oil and gas conservation commission] shall have jurisdiction over any
111 subsequent extraction of sequestered carbon dioxide that is intended for commercial or industrial
112 purposes.

113 (K) Nothing in this section shall be construed to create any liability by the state for failure
114 to comply with this section.

115
116 Section 4. [*Reporting Compliance.*] The [department of environmental quality] and the
117 [oil and gas conservation commission] shall submit a joint written report, on or before
118 [November 1] of each year, to the [joint minerals, business and economic development and joint
119 judiciary interim committees] as to all aspects of compliance with this legislation including, but
120 not limited to, the promulgation of rules and regulations, the formation of the [working group],
121 permitting and changes to pertinent federal regulations affecting the same.

122

123 Section 5. [*Appropriations to Perform Tasks Assigned Pursuant to the Act.*] There is
124 appropriated [two hundred fifty thousand dollars (\$250,000.00) from the general fund] to the
125 [department of environmental quality] for use by the [working group] created by Section 3 (G) of
126 this Act for expenses related to performing the tasks assigned it pursuant to this Act. Expenses
127 may include the costs to secure expert consultation. This appropriation shall be for the period
128 beginning with the effective date of this Act and ending [June 30, 2010]. Notwithstanding any
129 other provision of law, this appropriation shall not be transferred or expended for any other
130 purpose and any unexpended, unobligated funds remaining from this appropriation shall revert as
131 provided by law on [June 30, 2010]. This appropriation shall not be included in the
132 [department's] standard [biennial budget request].
133

134 Section 6. [*Oil and Gas Activities at Geologic Sequestration Sites.*] Nothing in Section 3
135 of this Act shall be deemed to affect the otherwise lawful right of a surface or mineral owner to
136 drill or bore through a geologic sequestration site as defined by Section 2 (A)(2) of this Act, if
137 done in accordance with the [commission rules] for protecting the geologic sequestration site
138 against the escape of carbon dioxide.
139

140 Section 7. [*Selling Emission Reduction Credits.*] Nothing in this Act is intended to
141 impede or impair the ability of an oil and gas operator to inject carbon dioxide through an
142 approved enhanced oil or gas recovery project and establish, verify, register and sell emission
143 reduction credits associated with the project.
144

145 Section 8. [*Severability.*] [Insert severability clause.]
146

147 Section 9. [*Repealer.*] [Insert repealer clause.]
148

149 Section 10. [*Effective Date.*] [Insert effective date.]