

# Interstate Oil and Gas Compact Commission Model Statutes

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The following analysis was prepared at the request of the Energy and Telecommunications Interim Committee (ETIC) Chairman Rep. Harry Klock. The full ETIC also requested additional information on the Interstate Oil and Gas Compact Commission model statutes during its November meeting in Helena. At the ETIC's January meeting the points covered in this report will be discussed. These comments also have been shared with the Montana Board of Oil and Gas Conservation (MBOG) and the Montana Department of Environmental Quality (DEQ) Water Protection Bureau. Their comments are attached, and Tom Richmond of the MBOG and Bonnie Lovelace and Paul Skubinna of the DEQ will be available to answer additional questions about their comments.

Throughout the analysis below, there are two issues that merit consideration: 1.) CO<sub>2</sub> is viewed as a commodity not a hazardous substance under the IOGCC model statute; and 2.) the Environmental Protection Agency (EPA) has announced it intends to develop regulations in this arena. Classification of CO<sub>2</sub>, either as a hazardous substance or a commodity, by the EPA will determine and influence any state statute that is implemented. The EPA has said its regulations may not be final until 2010 or even 2011.

Without the EPA guidelines, the ETIC may be limited in its efforts to discuss potential legislation. The analysis below attempts to highlight areas where the ETIC may consider legislation without full knowledge of the pending federal guidelines.

A summary of each section of the IOGCC model statute and discussion comments are provided:

## **Section 1. Jurisdiction**

The IOGCC recommends that a state regulatory agency, presumably the MBOG, have the jurisdiction and authority over all persons and property necessary to administer and enforce carbon sequestration regulations. In doing so, the MBOG would be able to conduct hearings and promulgate and enforce rules, regulations, and orders concerning the geological storage of carbon dioxide.

### ***Discussion points:***

#### ***1. Underground Injection Control program -- federal regulations***

Because the EPA is developing regulations for carbon sequestration ensuring there is a permit system consistent with the Safe Drinking Water Act, it is uncertain whether a state agency may be granted jurisdiction in this arena. The Safe Drinking Water Act

established the Underground Injection Control (UIC) program to allow the safe injection of fluids into the subsurface.

Under the UIC program, there are five well classifications:

<b>EPA Injection Well Classification System</b>		
<b>Well Classes</b>	<b>Injection Well Description</b>	<b>Approximate inventory</b>
Class I	-- Inject hazardous wastes beneath the lowermost Underground Source of Drinking Water (USDW) -- Inject industrial non-hazardous liquid beneath the lowermost USDW -- Inject municipal wastewater beneath the lowermost USDW	500
Class II	-- Dispose of fluids associated with the production of oil and gas -- Inject fluids for enhanced oil recovery -- Inject liquid hydrocarbons for storage	147,000
Class III	-- Inject fluids for extraction of minerals	17,000
Class IV	-- Inject hazardous or radioactive waste into or above a USDW. This activity is banned. These wells can only inject as part of an authorized cleanup.	40 sites
Class V	-- Wells not included in other classes. Inject non-hazardous liquid into or above a USDW.	Range from >500,00 to >685,000

*Source: EPA*

The EPA can authorize states to implement the UIC program. States can apply for primary responsibility, or primacy, over all classes of wells, only oil and gas wells (Class II), or all wells except oil and gas (Classes I, III, IV and V). If a state does not apply for and obtain primacy, the EPA implements the program through regional offices. Native American tribes follow the same rules for primacy.

The EPA has delegated primacy for all well classes in 34 states. It shares responsibility in six states, including Montana. The EPA implements the program for all well classes in 10 states and on all tribal lands. To help pay for program costs, the EPA provides grant funds to delegated programs. States provide a 25% match.

In 1987, the Montana Legislature approved House Bill 795, granting the MBOG authority over Class II wells and developed a fee for the program. Montana, through the MBOG, submitted an application to EPA for approval of an UIC program governing Class II injection wells. In November 1996, the EPA determined that the MBOG's UIC program for Class II injection wells met the requirements of the SDWA. Title 82, chapter 11, part 1, MCA grants the MBOG exclusive jurisdiction over all Class II injection wells.

In Montana, the EPA oversees Class I, III, IV, and V wells. The Montana Department of Environmental Quality has in the past discussed applying for oversight of Class I, III, IV, and V wells but has not pursued an application.

In March 2007, the EPA released a recommendation that all carbon sequestration pilot projects be permitted under Class V experimental technology wells. In October 2007, the EPA announced plans to develop regulations for long-term carbon sequestration. The EPA plans to propose regulatory changes to the UIC program in the summer of 2008 and collect public comment as it works through the rule development process.

It is unknown at this time whether the EPA will create a new class of UIC wells for carbon sequestration projects, or develop guidelines under an existing classification. It also is unknown at this time, if the EPA will allow states to petition for oversight of UIC wells used for long-term carbon sequestration. Despite the unknowns, the ETIC could discuss a contingent delegation of authority over well classifications, including those used for the long-term storage of CO<sub>2</sub>. As noted above, the Legislature granted the state oversight over Class II wells nine years before the EPA granted the state primacy.

## *2. Montana Climate Change Advisory Committee recommendations -- Agency oversight*

Recommendations by the Montana Climate Change Advisory Committee Energy Supply Technical Working Group address sequestration and oversight. In a portion of an overall recommendation requiring power plants work toward fuel-neutral emissions levels, the MCCAC recommends fossil fuel-fired power plants file a plan with the DEQ

that details the facility's commitment to capture CO<sub>2</sub> and implement terrestrial and or geological sequestration as part of operating plans and permits.

The requirement would be established through rulemaking by the Montana Board of Environmental Review (BER), based on the recommendation. The CCAC recommends the DEQ petition for such a rule, and that the Legislature adopt supporting language.

During the 2007 Legislative Session, Senate Bill No. 218 was introduced. It authorized the Board of Environmental Review to adopt rules establishing a carbon sequestration program and permit system. The bill as amended also would have required the BER to hire a consultant to assist in rulemaking and consult with the MBOG and the Department of Natural Resources and Conservation in its implementation of a CO<sub>2</sub> sequestration program. The bill was tabled in a House committee.

This raises the question of whether, if granted the ability to apply for oversight under the UIC program, the DEQ, the MBOG, a hybrid, or another agency is best suited to oversee a carbon sequestration program. The IOGCC model regulations note, "because most of the proposed CO<sub>2</sub> geological storage regulations are based on natural gas storage and oil and gas injection well rules, the Task Force reasoned that states might well conclude that the most logical and best equipped lead agency for implementing and administering regulations effectively and efficiently would be the state oil and gas regulatory agency." The task force recognized that some states may select another agency, such as an environmental agency or public utility commission.

## **Section 2. Definitions**

The IOGCC recommends defining terms, including carbon dioxide, reservoir, storage facility, storage operator, and geological storage. For background, "facility" is defined as the underground reservoir, underground equipment, and surface buildings and equipment used for a storage operation. "Reservoir" is defined as any subsurface sedimentary stratum, formation, aquifer, or cavity or void including oil and gas reservoirs, saline formations and coal seams suitable for injection and storage of carbon dioxide.

### ***Discussion points***

#### ***1. Existing definitions***

If the committee pursues legislation, definitions may merit additional discussion.

### **Section 3. Approval, record or order, certificate -- General requirements**

Sections 3 and 4 are the heart of the regulatory structure in the IOGCC model statute. The IOGCC establishes a set of guidelines authorizing a state regulatory agency, presumably the MBOG, enter into an order, after public notice and hearing, approving a proposed storage facility and designating the horizontal and vertical boundaries of the storage facility. Before approving a storage facility, the agency must find:

- 1.) The facility and reservoir are suitable and feasible for injection and storage;
- 2.) That a good faith effort has been made to obtain the consent of a majority of the owners having property interests affected by the storage facility, and that the operator intends to acquire any remaining interest by eminent domain or otherwise allowed by statute;
- 3.) That the use of the storage facility will not contaminate other formations containing fresh water, oil, gas, coal or other mineral deposits; and
- 4.) That the proposed storage will not unduly endanger human health and the environment and is in the public interest.

Once the agency makes those four findings and grants an order of approval, a copy of the order would be filed in the probate court (or other appropriate jurisdiction) of the county or counties where the facility is to be located.

Prior to injecting carbon dioxide, the storage operator would be required to have a "Certificate of Operation of Storage Facility," which would include a statement that the storage operator has acquired by eminent domain, or otherwise, all necessary ownership rights with respect to the storage facility. The certificate would be on record in the county or counties where the facility is located and with the regulating agency. It also would include the date for which the facility is effective.

If the boundaries of the storage facility contain any depleted pool of hydrocarbons from a previously established field or producing unit, the agency in its approval order would require such units or fields be dissolved as of the facility's effective date.

#### ***Discussion points:***

##### ***1. Uncertainty about federal guidelines***

As discussed under Section 1. of this analysis, because the EPA has not released its proposed regulatory framework under the UIC program, it is unclear whether states will be in a role to establish rules. If states are in a position to have primary responsibility, it is expected that those rules would have to meet minimum federal guidelines and possibly be accepted by the EPA.

## *2. Montana Oil and Gas law as a comparison*

Title 82 of the Montana Code Annotated outlines the provisions of mineral, oil, and gas exploration, extraction and reclamation, which may serve as a logical starting point for discussing a carbon sequestration framework.

Title 82, chapter 1 establishes compliance and notice for geophysical exploration. Prior to seismic work, surety bond, cash, certificate of deposit, or other instrument in the amount of \$10,000 is required to be on file with the secretary of state's office. An exploration permit is required, and the MBOG also must be notified in accordance with 82-11-122. Notification of the surface owner prior to any activity is detailed. Noncompliance is a misdemeanor.

Title 82, chapter 11 details regulation by the Board of Oil and Gas Conservation. This provides much of the backbone that would most likely be used in adapting CO<sub>2</sub> regulations. It is discussed further in Section 4 of this report.

### **Section 4. Storage Project permitting -- protections**

The IOGCC model statute grants the agency the ability to issue orders, permits, certificates, rules, and regulations, including establishment of financial sureties to regulate the drilling, operation, and well plugging and abandonment of a storage facility to protect against pollution, invasion, and the escape or migration of carbon dioxide.

In the model rules, which presumably would be implemented by the MBOG, the IOGCC provides further explanation. The model legislation, however, simply grants the agency the ability to promulgate such rules.

#### *1. Montana oil and gas law as a comparison.*

Title 82, chapter 11, allows the MBOG to "adopt and enforce rules and orders to effectuate the purpose and the intent of the chapter." It specifies oversight of Class II injection wells, including issuance of permits.

Title 82, chapter 11, outlines fees for processing applications, notice to surface owners, requirements for oil and gas operators, requirements relating to water protection, and administrative procedures, including public hearings and notice. Oil and gas regulations provide a clear outline for public participation and public review and comment of permitting decisions. The IOGCC model rules do not detail this, beyond that which is discussed in Section 3.

In Montana's oil and gas laws, a privilege and license tax is provided. Rehearing, court review for a person adversely affected by a rule also are outlined. Civil and criminal penalties apply, if a person violates rules or laws in Title 82, chapter 11. The model statutes do not provide an enforcement mechanism or provisions for penalty.

Proposed carbon sequestration legislation would need to grant an agency either broad rulemaking authority or detail that authority, for example, providing the required details

on permit issuance. Rules would be needed in multiple areas, including time frames for specific actions, notice and hearing requirements, and potential requirements for CO<sub>2</sub> facility operators. The IOGCC model statutes offer broad rulemaking authority, as do Montana's current oil and gas permitting laws.

## *2. Hazardous waste vs. commodity*

If carbon dioxide that is injected into the subsurface is considered hazardous, the federal Resource Conservation and Recovery Act (RCRA) may need to be considered. For example, the Legislature has previously found that petroleum products and hazardous substances stored in underground tanks are regulated under the federal Resource Conservation and Recovery Act of 1976, as amended, and must be addressed and controlled properly by the state. The DEQ is authorized to establish, administer, and enforce an underground storage tank leak prevention program for these regulated substances.

In Montana a "hazardous waste," as defined in 75-10-403 MCA, is a waste or combination of wastes that:

"because of its quantity, concentration, or physical, chemical, or infectious characteristics, may:

- (i) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
- (ii) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed."

Hazardous waste injection wells are not regulated under the Montana hazardous waste program, but are subject to requirements under a federal hazardous waste program. As noted above, Class IV wells are banned. The owner or operator must have a permit issued by the EPA under the UIC program, and most are for specific cleanup plans.

## *3. Water Quality considerations in Montana*

The Montana Water Quality Act in Title 75, chapter 5, MCA provides guidance for the "prevention, abatement, and control of water pollution." The BER is assigned the responsibility of establishing criteria to determine whether activities, or a class of activities, result in nonsignificant changes in water quality. Nonsignificant activities are enumerated in 75-5-317, MCA. It also is notable that in Montana, beyond stated exemptions, it is unlawful to construct, modify, or operate a disposal system that discharges into any state waters without a DEQ permit. "State waters" include surface and groundwater. The EPA in a letter to the Department of Energy concerning the IOGCC recommendations notes that the model regulations "do not have the kind of overarching protectiveness standard that EPA requires of an approvable UIC program." The EPA letter is attached to this document.

## **Section 5. Eminent domain or other authority**

The IOGCC model statute empowers a storage operator, after receiving the approval of the MBOG, to exercise the right of eminent domain and to acquire all surface and subsurface rights and interests necessary for the purpose of operating a storage facility. The right of eminent domain would not prevent the right of a landowner to drill through a storage facility in a manner approved by the MBOG. The right of eminent domain also would not prejudice the rights of landowners or other rights or interests for other uses.

The IOGCC recommends that because there are hearings for permitting and potentially for eminent domain, these hearings be combined to streamline the process.

### ***Discussion points***

#### ***1. Underground gas storage reservoirs in Montana***

In 82-10-302 MCA, the underground storage of natural gas is determined to be in the public interest and welfare of the state. The law goes on to enumerate the use of eminent domain to acquire underground storage, as provided in Title 70, chapter 30. Acquisition is also limited to "the area of the underground sand, formation, or stratum that may reasonably be expected to be penetrated by gas displaced or injected into the underground reservoir." Certification for the use of eminent domain as well as proceedings that must be followed are enumerated.

The right to store natural gas in an underground reservoir must be secured by the operator prior to receiving a state permit to operate the project. If the right cannot be acquired voluntarily, the operator can request the state use eminent domain. Federal regulations, at least at the EPA level, aren't expected to address the issue of eminent domain. The ETIC may wish to discuss eminent domain and carbon sequestration as a public use as enumerated in 70-30-102, MCA.

#### ***2. Pipelines***

During the 2007 Legislative Session, H.B. 24 was approved granting CO<sub>2</sub> pipelines "common carrier" status. That bill, however, was void due to a contingency clause. With "common carrier" status granted for a pipeline, eminent domain could be exercised as outlined in Title 70, chapter 30.

## **Section 6. Carbon Dioxide Storage Facility Trust Fund**

The IOGCC model statute establishes a "Carbon Dioxide Storage Facility Trust Fund" that would be administered by the MBOG. A tax or fee equal to \$\_\_ per ton of carbon dioxide injected for storage is to be levied on each storage operator. The Trust Fund would be used for long-term monitoring at the site, including remediation of problems at the site and the plugging and abandoning of wells for use as observation wells.



### ***Discussion points***

#### ***1. Oil and gas production damage mitigation account***

Title 82, chapter 11, part 1 establishes a damage mitigation account in the state special revenue fund. The MBOG controls the account. At the start of each biennium \$50,000 from the interest income of the resource indemnity trust fund is allocated to the mitigation account. The fund, however, is capped at \$200,000. The account also includes funds received from bonds for properly plugging dry or abandoned wells. The MBOG can authorize payment for the cost of properly plugging a well and reclaiming and/or restoring a site or other area damaged by oil and gas operations. The site must be abandoned, and the responsible person either cannot be identified or refuses to take corrective action.

#### ***2. Fee that meets future long-term needs***

Because the state would assume liability for storage projects (see Section 8.) and essentially the Carbon Dioxide Storage Facility Trust Fund would need to be sufficiently funded to cover problems for an undetermined period, establishing a reasonable fee would require analysis of multiple factors. It is possible that a single catastrophic event could deplete such a fund, unless certain safeguards are contemplated. Presumably, the trust fund also would allow the state to do future monitoring and remediation at a site that was closed. At this time, other states contemplating the IOGCC model statutes have not settled on an appropriate fee. Wyoming, for example, is not currently looking at the IOGCC model statutes in this area, but instead is requiring the operator to maintain liability.

The IOGCC notes that during the post-closure period, which is an indefinite amount of time, seismic mapping of plume location, pressure samples from observation wells, additional monitoring wells, simulation models, ongoing monitoring of human activity in the area, monitoring of biological indicators, and adequate record keeping would all be necessary. These all could require substantial funding.

### **Section 7. Administration expenses**

To fund administration and enforcement of the program during the operational phase of a storage facility, and to fund inspections, testing, and monitoring, an additional fee is recommended. Each storage operator would pay a per ton tax or fee collected as a percentage of the fee or tax levied in Section 6.

### ***Discussion points***

#### ***1. Oil and gas privilege and license tax***

To provide funds for the expenses of the operation and enforcement of Title 82, chapter 11, an operator or producer of oil and gas in Montana pays an assessment not to exceed 3/10 of 1% of the market value of each barrel of crude petroleum produced, saved and marketed and the same rate on the market value of each 10,000 cubic feet of natural gas.

## *2. Oil and gas fees*

Title 82 establishes a fee to defray the expenses incurred for processing an application from an operator or oil producer. The fee is based on the complexity of processing an application. Title 82, chapter 11 also requires the operator of a Class II injection well pay an annual operating fee not to exceed \$300 per injection well. The fee is used to defray the expenses of operating and enforcing the Class II injection well regulatory program.

## **Section 8 Liability Release**

Based on the IOGCC model statute, 10 years (or another time frame established by rule) after the storage operation ceases, the MBOG would issue a "Certificate of Completion of Injection Operations." The operator would show that the reservoir is "reasonably" expected to retain its integrity and the carbon to remain underground. Ownership of the project and the carbon dioxide stored underground would then transfer to the state. With issuance of the "Certificate of Completion of Injection Operations," the MBOG would release the operator and all generators of the carbon dioxide from all liability associated with the project. Any performance bond posted by the operator would be released, and the MBOG would be responsible for continued monitoring at the site and any future remediation.

## ***Discussion points***

### *1. Precedent*

The IOGCC notes that the intent of Section 8 is to allow for regulatory certainty by the industry and to promote sequestration efforts. The Task Force decided a 10-year time frame prior to release of liability would allow time to determine the integrity of a storage site. The IOGCC discussed time frames ranging from 3 to 10 years, noting, "the amount of time prior to release of the operator and generator from liability is ultimately a state decision."

This is a unique approach to the liability issue. There are no comparable models in Montana law, where the state assumes complete liability for an activity or cleanup when an operator or owner can be identified and located. Because the carbon dioxide is expected to be sequestered underground indefinitely, the state would be assuming this liability for an indefinite amount of time. While Montana's Constitution requires a two-thirds vote of the Legislature to limit state liability, there is no super majority requirement

for creating a liability. As noted above, other states reviewing the model rules are looking at the liability issue. Wyoming, for example, is not looking at legislation that assumes such liability. Texas has approved legislation allowing the acceptance of liability for carbon stored underground, specifically for FutureGen projects.

### **Section 9. Cooperative Agreements**

The MBOG would be authorized to enter into cooperative agreements with other governments or government entities to regulate storage projects that extend beyond state regulatory authority.

#### ***Discussion points***

This is similar to 82-11-112, MCA, which authorizes the MBOG to cooperate with any other state, interstate, or federal agency to effect Montana's oil and natural gas regulations and expend the funds necessary to do so.

### **Section 10. Enhanced hydrocarbon recovery operations.**

The MBOG would be authorized to develop rules allowing for the conversion of enhanced oil recovery operations into storage facilities. It clarifies that geological sequestration requirements outlined in the model statute would not apply to carbon dioxide projects exclusively used for enhanced oil or gas recovery.

#### ***Discussion points***

Enhanced recovery is defined in Montana code. The MBOG currently has rules under 36.22.1401-36.22.1425 for such an injection well, under Class II.