

**Unofficial Draft Copy**

As of: May 27, 2008 (10:52am)

LC4002

\*\*\*\* Bill No. \*\*\*\*

Introduced By \*\*\*\*\*

By Request of the \*\*\*\*\*

A Bill for an Act entitled: "An Act specifying ownership of pore space in strata underlying surfaces; affirming the dominance of the mineral estate; providing for a description of a pore space prior to a transfer; requiring the description to be filed with a county clerk; and providing an effective date."

Be it enacted by the Legislature of the State of Montana:

NEW SECTION. **Section 1. Short title.** [Sections 1 through 6] may be cited as the "Pore Space Ownership Act."

NEW SECTION. **Section 2. Purpose.** The purpose of [sections 1 through 6] is to provide for the protection and compensation of surface owners of land underlaid with pore space that may be used for the storage of carbon dioxide or other substances and to affirm the dominance of mineral estates while allowing for the necessary development of pore space.

NEW SECTION. **Section 3. Definitions.** As used in [sections 1 through 6] the following definitions apply:

(1) "Pore space" is defined to mean subsurface space of any size and whether vacant or filled that can be used as storage space for carbon dioxide, compressed air, or other substances

injected into the space for storage. It does not include a natural gas storage reservoir.

(2) "Surface owner" means the person who holds record title to or has a purchaser's interest in the surface of the land.

NEW SECTION. **Section 4. Ownership of pore space.** The ownership of all pore space in all strata below the surface of this state is vested in the owner of the surface above the strata.

(2) A conveyance of the surface ownership of real property is a conveyance of the pore space in all strata below the surface of that real property, unless the ownership interest in that pore space previously has been severed from the surface ownership or is explicitly excluded in the conveyance.

(3) It is the property owner's right as established by 70-16-101 to convey pore space. An agreement conveying mineral or other interests underlying the surface may not convey ownership of any pore space in the stratum unless the agreement explicitly conveys that ownership interest.

(4) [Sections 1 through 6] do not alter, amend, diminish or invalidate rights to the storage use of subsurface pore space acquired by contract or lease prior to [the effective date of this act].

(5) [Sections 1 through 6] do not affect the respective liabilities of any party.

NEW SECTION. **Section 5. Dominance of mineral estate.** (1)

[Sections 1 through 6] may not be construed to change or alter common law in accordance with 1-1-108, as it relates to the rights belonging to, or the dominance of, the mineral estate, including but not limited to the right to mine, drill or recomplete a well, inject substances to facilitate production, or an enhanced recovery project as defined in 82-11-101 for the purposes of recovery of oil, gas or other minerals.

(2) If it is determined that an underground reservoir, natural or manmade, is depleted of oil or gas or abandoned by the mineral owner, it may be considered pore space in accordance with the provisions of [sections 1 through 6].

(3) All instruments transferring the rights to pore space under [sections 1 through 6] must describe the scope of any right to use the surface estate. The owner of any pore space right may not use the surface estate beyond the conditions established in a properly recorded instrument.

**NEW SECTION. Section 6. Pore space description and requirements for transfer.** (1) Transfers of pore space rights made after [the effective date of this act] are void at the option of the owner of the surface estate if the transfer instrument does not contain a specific description of the location of the pore space being transferred.

(2) The description must include but is not limited to:

(a) a detailed description of the subsurface stratum or strata involved in the transfer;

(b) a legal description of the boundaries of the surface

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lying over the transferred pore space; and

(c) a list of the existing lessees, rights, or interests on the property, including mineral interests and any other rights attached to the surface lying over the transferred pore space.

(3) The description required in this section must be reviewed by the county surveyor and a copy must be transmitted to and filed with the clerk of the county or counties where the transferred pore space is located.

NEW SECTION. **Section 7. {standard} Codification**

**instruction.** (1) [Sections 1 through 6] are intended to be codified as an integral part of Title 70, and the provisions of Title 70 apply to [sections 1 through 6].

NEW SECTION. **Section 8. {standard} Effective date.** [This act] is effective July 1, 2009.

- END -

{Name : Sonja E. Lee  
Title : Research Analyst  
Agency : LSD LEPO  
Phone : 406-444-3078  
E-Mail : sonjalee@mt.gov}

July 7, 2008

Honorable Harry Klock  
Chairman, Energy and Telecommunications Interim Committee  
P. O. Box 201706  
Helena, MT 59620-1706

Dear Chairman Klock and Members of the Committee,

Oversight Resources is pleased to be able to offer the following comments regarding draft legislative proposals LC 4002 and 4003 that will be considered by your committee July 16<sup>th</sup>. Oversight Resources is a small, privately held, start up company located in Bozeman, Montana. Oversight Resources is interested and involved in an array of energy related activities including wind and oil/gas development. Carbon capture has unique opportunities for companies such as ours and we have been following your progress.

LC 4002 proposes to ensure that pore space under a person's private property is also owned by the surface owner. Oversight Resources opposes LC 4002 until such time as other issues involved in carbon capture and storage are resolved, particularly the liability issue. There is no doubt that pore space is owned by the surface property owner, but by creating a separate new property estate without resolving other issues related to carbon storage could have many unintended consequences that actually make energy development more difficult. No work has been done to clarify liability issues that surround carbon storage, nor has the EPA decided how to classify CO2 and regulate how CO2 fits with current underground injection regulatory frameworks. Frankly, individual states taking action prior to the Federal Government may hinder energy development on public and private lands.

If this committee is intent on passing some legislation regulating carbon capture we suggest a thorough and comprehensive study using information from a wide variety of sources. Oversight Resources supports including pore space ownership to the areas that you are intending to study in LC 4003.

Thank you for the opportunity to comment on these issues.

Sincerely,

**Bryan F. Rogan**  
**OverSight Resources, LLC**  
1087 Stoneridge Drive, Suite 2E  
Bozeman, MT 59718  
Tel: 406-586-8440  
roags@msn.com

## Nowakowski, Sonja

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**From:** Blattie, Harold  
**Sent:** Thursday, July 03, 2008 5:04 PM  
**To:** Nowakowski, Sonja  
**Subject:** ETIC Bill Draft LC 4002 Comments

Sonja,

I will not be able to attend the ETIC meeting but would like to submit comments on LC 4002 and specifically Section 6 of the bill draft.

Thank you,

Harold

Members of the Energy and Telecommunications Interim Committee:

RE: LC 4002

I am going to focus only on the use of the term "the county surveyor" and the word "file" in Section 6, subsection 3.

My experience with the term "the county surveyor" in §76-2-102, MCA, (zoning law) is that it causes nothing but problems because many counties no longer have "county surveyors." Some counties have eliminated the position; other counties have incorporated any surveyor function into the department of public works and I suspect those offices do not have "the county surveyor."

Subsection (3) of Section 6 of LC4002 imposes a duty on an often non-existent person. Many of our eastern counties don't even have an examining land surveyor, let alone a county surveyor.

I can envision nothing but problems in the offices of clerk and recorders when they are presented with a description per Section 6, subsection (2), if they even know what "pore space" is. I suspect the clerks will be unable to evaluate the information required by subsection (2), and in most cases will not have a "county surveyor" to turn to. Even if there is a surveyor in private practice in a county, I suspect those surveyors would not be able to determine whether the description is accurate.

Most important, from a liability standpoint, I am concerned that the proposed bill transfers the liability for an inadequate description under subsection (2) to the county, because subsection (3) requires a review by "the county surveyor" which some will argue imposes a legal duty on the county to ascertain the accuracy of the section (2) description. I fear landowners or Realtors will try to satisfy subsection (2) on their own, then leave it up to the county to determine whether they did it correctly.

As to the use of the word "file" imposing the requirement that the documents be "filed", I believe the more appropriate term would be "record (ed)". I have requested that the county clerks provide you with information about how filed and recorded documents are handled and will assume they have done so.

Thank you,

Harold Blattie, Executive Director of the Montana Association of Counties

**Nowakowski, Sonja**

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**From:** Raney, Bob  
**Sent:** Tuesday, June 10, 2008 2:29 PM  
**To:** Nowakowski, Sonja  
**Cc:** Jergeson, Greg; Toole, Ken; Wiseman, Rep. Brady  
**Subject:** RE: ETIC carbon sequestration draft report

Hi Sonja,

I have a few comments in reply to your request..

On the carbon capture study - a whole lot is being shuffled under the table that is so important for progress in the area of Geological storage of CO<sub>2</sub>. To not include it in the study is to put off for two more years our opportunities. First, the study misses a very, very important point - where to put the CO<sub>2</sub>. If the idea is to get a modern carbon capture coal plant built in Montana, then the most important question to answer is WHERE. The study should include maps and references to where conditions exist to explore further the most economical and environmentally proper places in Montana to do it - where are the geological possibilities, where are the best transmission line and pipe line routes, where will the load go, is it EOR the first choice or only choice and etc. This limited study appears to be a (let's not do much" compromise by ETIC to do next to nothing to advance Montana as a Carbon sink or help us prepare for our own domestic Montana needs.

.\$25,000 won't lift the study off the ground. There are serious costs (economic, social and environmental) associated with CO<sub>2</sub> sequestration. The committee should seriously expand the size, scope and money for this study. The Saudi Arabia of coal ought to move forward like they intend to use coal in the modern carbon constrained environment. The ETIC work plan called for much more along this line:

Based on the work plan adopted by the ETIC in 2007, members reviewed seven specific issues:

1. Feasibility of geological and terrestrial carbon sequestration in Montana and the characteristics of areas of the state where carbon could be sequestered.

Big Sky Carbon Sequestration Partnership will locate geological formations, but someone has to do the actual site drilling and exploration and locate the places that make the most economic and environmental sense. And then convince an entrepreneur that we have the right place to invest \$4 or \$5 billion. As an example, a working group sponsored by the PSC is seeking a \$400,000 grant just to have UM Butte Tech study particular geological sites (that make both econ and enviro sense) to hold compressed air for compressed air storage generation facilities - because we want one or more built here in Montana.

Thanks for listening

Bob Raney  
MT PSC Commissioner

7/7/2008

**Nowakowski, Sonja**

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**From:** Robert Solum [robert\_solum@yahoo.com]

**Sent:** Tuesday, June 10, 2008 5:17 PM

**To:** Nowakowski, Sonja

**Subject:** carbon sequestration study

Sonja,

I don't see the need to go forward with programs like this until it has been determined that we even have a problem. I have repeatedly asked for the science that has convinced you that man is responsible for catastrophic global warming. No one including you or your organization or your colleagues have been able to produce appropriate science to settle the matter.

If it can't be shown scientifically that we have a problem why on earth would we propose solutions? This is so elementary it takes my breath away that we are even discussing it.

Robert E. Solum

7/7/2008



## Nowakowski, Sonja

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**From:** Lovelace, Bonnie  
**Sent:** Tuesday, June 17, 2008 1:50 PM  
**To:** Nowakowski, Sonja  
**Subject:** Comments/edits on carbon sequestration report

Sonja: I assume you would like another set of eyes on this one. I have a few small comments.

Page 4 Costs and benefits of carbon sequestration, Finding 2--could you add to risks to humans (and animals!) leakage to the surface? I know you discuss it later, but it could fit here

Page 25, Table 2: column 1, second choice--do you mean With capture and geological storage, not Without

Page 27 (and this is really small) Risks--three ski patrol members--plural not singular

Nice report.

Bonnie Lovelace

## Nowakowski, Sonja

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**From:** Fred Bonnett [bb926@hotmail.com]  
**Sent:** Tuesday, July 08, 2008 7:32 AM  
**To:** Nowakowski, Sonja  
**Subject:** Oxygen and the Carbon Sequestration Study

Dear Sirs:

The sequestration of one pound of carbon in the form of CO<sub>2</sub> will remove 2.7 pounds of oxygen from the atmosphere. Carried out on a large scale such procedures will effect the total amount available free oxygen in the atmosphere. The consequences of such an O<sub>2</sub> reduction, while far from fully understood, will certainly effect plant growth and rates of organic decay.

Full studying of all the consequences of CO<sub>2</sub> sequestration is essential.

Sincerely,

Fred Bonnett  
2950 Rockrim Ln.  
Billings, MT 59102

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June 30, 2008

Ms. Sonja Nowakowski  
Legislative Environmental Policy Office  
P.O. Box 201704  
Helena, MT 59620-1704

**RE: Carbon Sequestration Study: An Analysis of Geological and Terrestrial Carbon Sequestration Regulatory and Policy Issues – public comment**

Dear Ms. Nowakowski:

The Montana Logging Association (MLA) offers the following comments on the above referenced study. The MLA represents approximately 600 independent logging contractors, each of which operate a family-owned enterprise that harvests and/or transports timber from forest to mill. In Montana, the vast majority of timberland is owned by government agencies; therefore the welfare of the MLA members is directly dependent upon the policies and actions of state and federal land managers.

As you know, forests cover more than one third of the world's area and constitute the major terrestrial carbon pool. Trees and other forest plants fix carbon dioxide through photosynthesis. All forest organisms release carbon dioxide through respiration and at the time of wildfire; therefore, forests are both sinks and sources for atmospheric carbon dioxide.

In the United State in 2004, forests sequestered 10.6% of the carbon dioxide released in the U.S. by the combustion of fossil fuels (coal, oil and natural gas). Urban forests sequestered another 1.5%. To further reduce U.S. carbon dioxide emissions by 7%, as stipulated in the Kyoto Protocol, would require the planting of "an area the size of Texas every 30 years", according to William H. Schlesinger, dean of the Nicholas School of the Environment and Earth Sciences at Duke University.

Increasing the biomass or carbon content of existing forests through forest management and fixing the carbon content through the manufacturing of wood products are the only viable options for enhancing sequestration of atmospheric carbon dioxide.

In order to determine the role of forests in mitigating atmospheric carbon dioxide content, it is essential to have an accurate inventory of the carbon content in forests and therefore we support active studies that collect accurate data for analysis.

The COLE 1605(b) Report for Montana - an on-line carbon estimating program sponsored by the US Forest Service Inventory and Analysis and the National Council for Air and Stream Improvement - reports forest carbon in metric tones per hectare by forest type in Montana. The report shows that there are approximately 2.84 million acres of ponderosa pine and 6.17 million acres of Douglas-fir in Montana. These two forest types combined sequester approximately 254 million tons of carbon in live trees.

In addition, recent studies comparing carbon sequestration in managed forests to un-managed forests shows a 3% increase the first year after harvest in ponderosa pine stands and a 4% increase in Douglas-fir stands compared to .5% and .8% respectively in un-managed stands.

Forest management not only plays a critical roll in sequestering atmospheric carbon dioxide, managing for a healthy ecosystem aids wildfire suppression and severity. Wildfires consume 5 – 10 million acres releasing approximately 10 tons of carbon dioxide annually. Ninety percent of the carbon released during a wildfire occurs within the first 14 hour pulse. Recent studies indicate that more carbon is sequestered in the medium-age forest types from 80 – 141 years. Old growth forests no longer sequester carbon they become a net storehouse and actually decrease carbon storage by a percentage point of 0.02 to 0.03 depending upon tree species. The amount of carbon released in a wildfire depends on the total biomass of the forest burned and how thoroughly the biomass is consumed. Biomass in a typical forest in Montana may

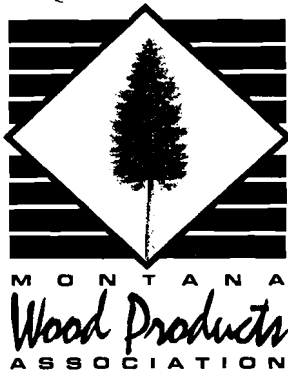
measure 1,000 kg to the hectare. Applying the more general carbon concentration of 50%, each hectare burned would release about 500kg of carbon into the atmosphere just from fires in Montana. It would take anywhere from 40 to 200 years – depending on species and age class – to recapture the released carbon from the atmosphere, assuming the same forest would not burn again in that time frame.

As you can see, forests play a critical roll in addressing climate change and green house gas emissions. Therefore, we believe it is important to not only manage Montana's pristine landscapes for forest health, wood fiber utilization, carbon sequestration and wildfire mitigation; but that Montana's unique interests are protected and enhanced as state and national policies are developed.

Thank you for this opportunity to comment. Feel free to contact me if you have questions at the Montana Logging Association Missoula field office at (406) 251-1415 or (406) 253-4485.

Sincerely,

Julia Altemus  
Resource Specialist



July 9, 2008

Energy and Telecommunications Interim Committee  
Legislative Services Division  
P. O. Box 201706  
Helena, MT 59620

Attention: Sonja Nowakowski

Thank you for the opportunity to provide a few brief comments regarding the draft Carbon Sequestration Study. The comments are presented on behalf of the 15 member companies of the Montana Wood Products Association. All of our members are involved in the manufacture of wood products with the raw material coming mostly from private and public Montana forest lands.

While very little in the report is directed at forestry and terrestrial sequestration there are a few points I would like to make regarding trees and their ability to sequester carbon. Forests take up atmospheric carbon dioxide and store it for decades in live and dead trees, soils, and harvested wood products through the process of photosynthesis. Therefore, forest land is known as a carbon sink. The caveat is that the trees do their best job when young, green, and healthy or when harvested and made into a product.

Unfortunately for Montana many of our treed acres are in extremely unhealthy condition – ripe for wildfires. In 2007 Montana lost approximately 800,000 acres of forest land to wildfire and pumped millions of tons of CO<sub>2</sub> into the air. Our air quality was severely affected with health alerts issued daily for weeks in various parts of the State. The trees that were salvaged following the fires and manufactured into products are again sequestering carbon. Sadly, hundreds of thousands of acres of burned trees remain on the landscape. The planting of seedlings for replacement of the burned trees would be the best case scenario because again young, green trees are the best at sequestering carbon.

The study is a bit sketchy in the cap and trade arena as it relates to forestry which is no surprise. Much has been made about carbon credits from forestry and the selling of the same to offset other sources of greenhouse gas but the jury appears to still be out with the majority of these

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Page 2

efforts. As the study points out, there are no national standards for establishing baselines related to terrestrial carbon sequestration and standards are needed to calculate the carbon reductions produced by a project. One scientific fact, however, is that live trees and wood products do have a positive impact on carbon dioxide in the atmosphere.

Research into the value of live trees and wood products for sequestering carbon is continuing in many venues. There are a number of arguments underway regarding just how much carbon trees do sequester and there is currently no definitive answer. There are many species, ages, sizes, and conditions of Montana's forests, so probably no fast and easy answer will soon be available regarding the amount of carbon that is sequestered. Meanwhile, trees will continue to do their part in cleaning the air we breathe, but active forest management is needed to provide healthy landscapes.

Again, thank you for the opportunity to provide a few comments. We will continue to follow the Committee's interim work and look forward to its final report and any possible legislation.

Sincerely,

A handwritten signature in black ink that reads "Ellen Simpson". The signature is written in a cursive style with a large, prominent "E" at the beginning.

Ellen Simpson  
Executive Vice President

# Carbon Sequestration Study

## Draft

### Comments

Dan Kieke  
Chevron

1. Page 2, ETIC Carbon Sequestration Findings, Finding #2 – It would be relevant to point out that most of the storage capacity predicted for this region by the Big Sky partnership is not in Montana.
2. Page 3, Finding #1 – this is somewhat misleading because it implies that all the geologic formation types listed – oil reservoirs, coal seams, saline aquifers, and basalts – exist in Montana. The basalt formations in the region are found in Washington, Oregon and Idaho.
3. Page 4, Finding #5 – Wyoming has not addressed the liability issue, but it may be worth pointing out that, at the other extreme, Texas approved legislation for FutureGen projects where the state would accept liability for CO<sub>2</sub> stored underground.
4. Page 4, Finding #8 – In addition to the risks listed, leakage of CO<sub>2</sub> to the surface poses a health risk to humans because CO<sub>2</sub> is denser than air and will, therefore, accumulate in low lying areas or areas without significant atmospheric dispersion, posing a risk of asphyxiation.
5. Page 6, paragraph 1 – Power plants are identified as the source of CO<sub>2</sub> emissions. While power plants are a major source of CO<sub>2</sub> emissions, and perhaps the most relevant for Montana, they are not the only source of CO<sub>2</sub> emissions.
6. Page 8, -
  - a. The description of **Geological Carbon Sequestration** states that captured CO<sub>2</sub> is liquefied. This is misleading because captured CO<sub>2</sub> would most likely be transported and injected as a supercritical fluid, not as a liquid.
  - b. Suitable geologic formations are described as domes. All geologic structures suitable for storage are not necessarily dome-shaped structures.
  - c. The **EOR** process is described as using alternate flows of water and CO<sub>2</sub>. This is commonly called a WAG process and is commonly used in CO<sub>2</sub> EOR floods today because the water slugs improve the flow of the CO<sub>2</sub> through the reservoir, leading to higher recoveries. However, this is not the only way CO<sub>2</sub> flooding can be applied and may very well not be the best way if the intent is to maximize the amount of CO<sub>2</sub> injected into and stored in a reservoir.
  - d. The CO<sub>2</sub> **EOR** mechanism is described as “the carbon makes the oil expand so it flows more easily.” First, it would be carbon dioxide and not carbon that would make the oil expand. And second, this description is not entirely accurate. Increased production from oil volume expansion is what immiscible CO<sub>2</sub> relies on as a recovery mechanism. For miscible flooding, which is preferred because it yields higher oil recoveries, the injected CO<sub>2</sub> and the reservoir oil mix intimately forming a single phase that flows through the

reservoir and increases oil recovery primarily because other mechanisms are operating, including reduced interfacial tension and reduced viscosity.

- e. The 35 million tons CO<sub>2</sub> being injected for EOR should read 35 million tons/yr.
7. Page 9, -
    - a. The comment “Most CO<sub>2</sub> that is currently used in the United States comes from natural carbon sinks ...” should read “Most CO<sub>2</sub> that is currently used in the United States comes from natural CO<sub>2</sub> reservoirs ...”
    - b. The idea of removing injected CO<sub>2</sub> for later use for EOR is an interesting concept and certainly changes the definition of stored CO<sub>2</sub> from waste to commodity. However, it does raise issues with how credits given to stored CO<sub>2</sub> would be handled if that CO<sub>2</sub> is later produced.
  8. Page 10, -
    - a. Care should be taken interpreting seismic results as conclusively showing that CO<sub>2</sub> has not leaked from the Sleipner project. The seismic results only indicate that volumes exceeding the limits of detection are not observed to have moved from the target storage formation.
    - b. Suggest rewording “Some tests have shown that carbon dioxide is about twice as adsorbing on coal as methane” to “Some tests have shown that coal will adsorb about twice as much carbon dioxide as methane.”
    - c. The discussion of storage in unmineable coal seams fails to mention the potential for swelling that may accompany adsorption of CO<sub>2</sub> on the coal surface. Swelling may reduce future injectivity of CO<sub>2</sub> into a coal seam and reduce the accessible surface area for additional CO<sub>2</sub> sequestration. This is probably a greater potential drawback to the technology than inability to mine the coal in the future.
  9. Page 25, -
    - a. Suggest a recommendation be made to the legislature that adequate consideration be given to the cost of capture. In this document, \$25/ton is quoted from the MIT “Future of Coal” report as being used for a “high price trajectory” for their modeling studies because this cost makes carbon capture and storage more economically feasible. The MIT report bases this comment on the assumption that \$25/tonne would be sufficient to offset the cost of capture and compression and \$5/tonne for transportation and storage. We consider these prices to be extremely optimistic, especially the capture costs. We suggest that the point be emphasized more strongly that these costs are uncertain, that a wide range of predicted costs exists and that the costs quoted here for capture are at the low end of current predictions.
    - b. Suggest changing “The feasibility and costs of capture however vary widely based on size, age and efficiency of a plant” to “The feasibility and costs of capture are site specific and depend on the size, age, efficiency of a plant, availability of plot space for capture and compression equipment and type of fuel burned (gas vs. coal).
  10. Page 25, Table 2 – “Without capture and geological storage” should read “With capture and geological storage.”
  11. Page 26, Table 3 –



- a. Recommend changing “Chilled Ammonia Process – (capture carbon downstream of flue gas)” to “Chilled Ammonia Process – (capture carbon in flue gas).”
- b. Capital costs for amine scrubber and chilled ammonia processes are quoted as being the same. We recommend pointing out that these costs for the chilled ammonia process are uncertain and likely to be optimistic.

12. Page 28, -

- a. Pumping CO<sub>2</sub> from a reservoir is mentioned as a groundwater contamination mitigation strategy. This is just one potential mitigation strategy. A project plan would include a risk assessment that would identify potential risks and include mitigation plans for dealing with any eventualities, including possibly pumping CO<sub>2</sub> from a reservoir.
- b. The concern about re-release of injected CO<sub>2</sub> undoing the benefits of sequestration needs to be put into proper context. As long as more CO<sub>2</sub> remains in the ground than was produced during the capture, transport, and injection of the CO<sub>2</sub>, then there has been a net reduction in emissions to the atmosphere.

## **LC4002**

### **Comments**

Dan Kieke

Chevron

Section 5. 2. Regarding the determination that an underground reservoir is depleted of oil or gas: Will some consideration need to be made for changes in technology that ultimately lead to a redefinition of what a depleted reservoir may be? What may be unrecoverable oil or gas resources today may not be unrecoverable in the future. CO<sub>2</sub> injection for storage may prevent application of improved technologies to recover this additional oil or gas. How will the mineral rights owner's interests be protected against this eventuality?

David A. Galt  
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ConocoPhillipsWard Polzin  
Enerplus Resources (USA)Dave Schaenen  
DLD EnterprisesSam Sitton  
Devon Energy Corp.Ralph Spence, Jr.  
Spence AccountsKeith Tiggelaar  
WBI Holdings, Inc.Bruce Williams  
Fidelity Exploration & ProductionMike Wirkowski  
ConocoPhillipsTerry Wisner  
Jefferson Energy Trading, LLC

July 10, 2008

Honorable Harry Klock, Chairman  
Energy and Telecommunications Interim Committee  
P. O. Box 201706  
Helena MT 59620-1706

Subject: MPA Comments on LC-4002 (Pore Space)

Dear Representative Klock:

The Montana Petroleum Association (MPA) is a member based trade association that represents oil and gas exploration, production, transportation and refining in Montana. With over 100 members we represent a wide spectrum of the oil and gas industry. We have participated in interim meetings of the Energy and Telecommunications Committee (ETIC) and are interested in your work to date. MPA has grave concerns with LC 4002, pore space ownership, draft legislation. We appreciate the opportunity to share these concerns with you and members of the committee.

Current Montana law 70-16-101, MCA was enacted in 1895 and recodified over the past 108 years and has not been challenged. It has served the State and its citizens well without issue. It says in full: **“Right of owner in fee-above and below the surface.** The owner of land in fee has the right to the surface and to everything permanently situated beneath or above it.” This statute has not presented problems in application and MPA asserts our existing laws need not be changed at this time.

Secondary and tertiary methods have been employed for decades to maximize production and recovery of oil. LC 4002 raises numerous legal, operational, and technical issues including the apparent creation of another property estate. In addition, the unknown consequences of this legislation on both the surface and mineral owner cause concern. While we very much appreciate the ETIC's efforts to address the issue, we fear implementation of LC 4002 will do much more harm than good.

LC 4002 creates many questions about the effect of current industry practices. For example, section 5, paragraph 2 of the draft states that if it is determined that a reservoir is depleted or abandoned the pore space reverts to the owner of the surface. While a determination of an abandoned well is regulated by the Board of Oil and Gas Conservation, they do not make an abandoned determination based on a zone or reservoir. Furthermore, it is widely known by petroleum experts that primary, secondary, and tertiary recovery methods never remove all, or even a majority, of the oil in place in a zone or reservoir.

Liability appears to be the most significant issue facing surface owners, industry and the legislature as we work to develop a frame work for carbon capture and storage (CCS). Add the fact that EPA and DEQ are considering how to treat CO2. Consider the consequences on the surface owner of defining CO2 as a hazardous waste or pollutant. Without addressing liability it is premature to address pore space ownership.

We are also concerned about the operational feasibility of using a county surveyor to review the property right transfer document. Most counties no longer have a county surveyor. In fact, many larger counties do not have a full time county surveyor, and they rely on contract service. This requirement would undoubtedly increase the workload and expense to the counties, particularly section 6 (2) (a), which requires geologic expertise. Allowing the surface owner to void a contract because the description is inaccurate is troublesome given the difficulty of describing the geologic strata. This ability to void a contract may cause investors to look with skepticism about the ability to sequester the carbon or make use of enhanced oil recovery in Montana.

Finally, we have heard of some concern about a similar bill passed in Wyoming during their last legislative session. There are some fears that it will be challenging to implement or may have unintended consequences on our industry. We see no compelling reason to act hastily, and not enacting pore space legislation would give all parties the opportunity to review Wyoming's implementation as well as monitor other States and Congress.

There are too many areas that have unknown consequences regarding pore space and the creation of another property estate. MPA urges the committee not to move forward with a committee sponsored bill.

Best Regards:



David A. Galt  
Executive Director

## 2008 Montana Stockgrowers Association Interim Policy

### **CARBON SEQUESTRATION**

WHEREAS: Carbon sequestration legislation is being reviewed by the legislative interim committee during the 2008 interim, and

WHEREAS: Many unknowns exist regarding the concept of sequestration, which may have consequences for landowners

BE IT RECOMMENDED: MSGA urge the MT legislature to fully study the issue of carbon sequestration and potential ramifications to landowners to address all consequences of implementing the concept in Montana.

Errol T. Galt  
106 71 Ranch Rd  
Martinsdale, MT 59053

July 3, 2008

The Honorable Harry Klock  
Chairman, Energy and Telecommunications Interim Committee  
P. O. Box 201706  
Helena, MT 59620-1706

Dear Chairman Klock and Members of the Committee,

As a landowner concerned about my rights to use the surface of my property I submit the following comments to the Committee regarding proposed legislative bill drafts LC 4002 and 4003.

LC 4002 proposes to ensure that pore space under a person's private property is also owned by the surface owner. State law already states that an owner of the surface owns to the center of the earth below the surface estate. While I respect and appreciate the willingness of the Committee to ensure my private property rights, I believe that introducing this bill in the 2009 Legislative session is premature. I have been paying close attention to the climate change debate, in particular, carbon storage issues and how they might affect my ability to control my surface property. There is no doubt that pore space is owned by the surface property owner, creating a separate new property estate without resolving other issues related to carbon storage is not wise. No work has been done to clarify the huge potential liability issues that surround carbon storage. Furthermore, the EPA has yet to decide if CO<sub>2</sub> is a pollutant. If the EPA rules that CO<sub>2</sub> is a pollutant would the surface owner become responsible for the clean up? These are just a couple of the many questions that need answers before you pass a pore space ownership bill. I strongly oppose LC 4002 and urge you to table the draft bill in any form.

LC 4003 proposes a study of other issues regarding geologic sequestration of carbon. I support the efforts of the committee to study the issues outlined in LC 4003. I also suggest you add pore space ownership, enhanced oil recovery and mineral interest conflicts to the areas that you are intending to study. If the Committee feels compelled to venture into developing a framework for regulating carbon capture and storage, a thorough and detailed study over the next two years makes sense.

I also question if the \$25,000.00 appropriation in the draft bill will be sufficient to complete such a broad and important study.

I appreciate the opportunity to comment. It is unlikely that I can attend the ETIC meeting on July 16<sup>th</sup>, and I would appreciate it if your staff could ensure that each member of the Committee has a copy of this letter.

Sincerely,



Errol T. Galt  
71 Ranch, Sun Coulee Ranch