



Energy and Telecommunications Interim Committee

60th Montana Legislature

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October 24, 2007

TO: Energy and Telecommunications Interim Committee (ETIC) Members

FR: Todd Everts, ETIC Legal Staff

RE: Analysis of Geologic Storage of Carbon and Storage Ownership Interest Issues

in Montana

Background

As a part of the ETIC's over-all review and analysis of the policy issues associated with sequestration of carbon in Montana, the ETIC requested (via the adoption of its Work Plan), an analysis of the issues associated with the carbon capture and geologic storage and surface and subsurface ownership interests.¹ The purpose of this memorandum is to analyze those issues within the Montana context and in light of a recent U.S. Environmental Protection Agency announcement.

General Overview

Whether you agree or disagree with the premise that climate change is occurring and that elevated levels of atmospheric carbon dioxide (CO_2) may be one of the causes of climate change, there is no question that many individuals and groups in the governmental, industrial, public interest, and private sectors throughout the country and the world have become intensely interested in the possibilities surrounding the mitigation of CO_2 emissions.² One of many technologies being evaluated is CO_2 capture and geologic sequestration (CCGS). Simply put, CCGS is the process of capturing CO_2 emitted from major sources such as power plants, transporting the CO_2 to an injection site, and then injecting the CO_2 into deep geological formations for long-term storage.

¹ See ETIC Work Plan 2007-2008, page 3, October 17, 2007.

² See Elizabeth J. Wilson & Mark A. de Figueirdo, Geologic Carbon Dioxide Sequestration: An Analysis of Subsurface Property Law, 36 ELR 10114, 1 (2006); Kate Robertson, Jette Findsen, & Steve Messner, International Carbon Capture and Storage Projects Overcoming Legal Barriers, DOE/NETL 2006/1236

Although seemingly simple to describe, CCGS raises a number of technical, legal, and regulatory policy issues that need to be addressed prior to wide-scale implementation. Issues include surface and subsurface property interests; impacts on other minerals and water; site suitability requirements; ownership of the injected CO2;, classification of CO₂; operational and long-term liability, and state, federal, and international CCGS regulatory jurisdiction; just to name a few.³

The uncertainty surrounding these issues has been the impetus for a number of recent state, interstate, federal, and international CCGS initiatives.⁴ The ultimate goal of many of these initiatives is to create an environment of regulatory certainty that facilitates CCGS investment and implementation and that minimizes all associated risks. With the recent October 11, 2007, announcement from the U.S. Environmental Protection Agency (EPA) that it plans to develop rules governing underground injection of CO₂, it appears that in the United States the EPA and not the individual states, will take the lead role in regulating CCGS.⁵ The EPA expects to issue the proposed rules by the summer of 2008.⁶ Obviously, it is unclear what these rules will look like and how much of a role states like Montana will play in CCGS regulation.

However, regardless of the outcome of the EPA regulations, states like Montana will play a key role in resolving certain legal and policy CCGS issues regarding property rights. One of those critical state issues is the legal uncertainty surrounding surface and subsurface property interests in the CCGS process.

³ See: Wilson et. al, supra note 2; Robertson et. al. supra note 2; Brian J. McPherson, Congressional Testimony before the U.S. Senate Subcommittee on Energy, Natural Resources, and Infrastructure on Carbon Capture, Sequestration and Enhanced Oil Recovery: Potential Opportunities and Barriers in the Context of Geologic and Regional Factors, pages 6 and 7 (April 26, 2007); Jeffery P. Price, Policy, Legal and Regulatory Issues in Carbon Capture and Storage, PowerPoint Presentation, CSLF Capacity Workshop, Pittsburgh, Pennsylvania, pages 8 and 9, (May 2007); Interstate Oil and Gas Compact Commission Task force on Carbon Capture and Geologic Storage, A Legal and Regulatory Guide for States and Provinces, (September 25, 2007); Ray Purdy and Richard Macrory, Geological Carbon Sequestration: Critical Legal Issues, Tyndall Centre for Climate Change Research, (January 2004); Carbon Sequestration Leadership Forum Policy Group Report from the Legal, Regulatory, and Financial Issues Task Force, Considerations on Legal Issues for Carbon Dioxide Capture and Storage Projects, CSLF-P-2004-14C (August 13, 2004); W.J. Lenstra & B.C.W. van Engelnburg, Legal and Policy Aspects: Impact on the Development of CO2 Storage, Ministry of Environment, The Netherlands, IPCC Workshop on Carbon Dioxide Capture and Storage (2004); and John Bradshaw, Pore Space Ownership and Liabilities in a Geological Storage Regime: Some Australian Perspectives, PowerPoint Presentation to IPIECA, (June 20, 2007.

⁴ Id. at 3

⁵ CarbonControlNews.com, EPA Rulemaking On CO2 Storage May Circumvent State Efforts (Posted October 12, 2007).

⁶ Id at 5.

A Limited Analysis of Surface and Subsurface Property Interests and CCGS

In order to capture, transport, and store CO₂, the right to use and acquire property interests both on the land's surface and subsurface is a fundamental prerequisite. Multiple property interests are at play within the context of CCGS, including storage space property rights, access to storage rights, ownership rights in other minerals and water, and ownership of the injected gas.⁷ Along with these property interests comes multiple players including surface owners, mineral owners, mineral lessees, state and federal governmental agencies, tribal governments, and public and private constituencies.

So what is Montana's potential role in the complex morass of interests and players? Again, with EPA taking a lead regulatory role that won't be defined until rules are proposed in the summer of 2008 and likely adopted in late 2009 or early 2010, the issues that Montana can address are likely limited to

- (1) clarifying the relationship of property interests associated with CO₂ storage; and
- (2) clarifying whether Montana's eminent domain powers should be used to acquire underground reservoirs for CO₂ storage.⁸

In order to clarify the property interests associated with CO₂ storage, a critical question has to be answered:

Are there legally recognized property interests in the pore spaces that may be used for CO₂ storage and if so, who owns those property interests?

A number of legal commentators have concluded that if states use natural gas storage law as a model in clarifying property interests associated with CO₂ injection and storage, then there are legally recognized property interests in the subsurface pore spaces and that the general preponderance of the case law concludes that the surface estate owner also owns the subsurface storage pore space. In addition, mineral owners could have affected future interests. Title to the natural gas remains with the storage operator. Commentators also note that in the development of natural gas storage law, both surface and mineral rights holders are included in terms of compensation and that

⁷ Supra note 1.

⁸ Even Montana's ability to address these issues may be suspect if EPA designates the injection of CO2 as the disposal of a waste product as opposed to storage of a useful product.

⁹ Supra notes 1 and 4.

mineral production supercedes storage rights.¹⁰ Montana law affirms these notions of compensation and the dominance of mineral production.¹¹ If the Montana Legislature decides to adopt CCGS policy regarding the interrelationships between the surface owners, mineral owners, and the storage operator, the provisions of Title 82, chapters 10 and 11, may be a helpful statutory starting point.

Under Montana law, the power of eminent domain is granted for natural gas storage projects. Although there was an attempt made in the 2007 Legislature to extend eminent domain powers for CO₂ transmission and geologic sequestration, that attempt failed. Montana law declares that the underground storage of natural gas is in the "public interest" because it promotes conservation of a valuable commodity and permits building of reserves for the orderly distribution and stable markets. ¹⁴

Obviously, the use of eminent domain for any activity is a controversial proposition. If the Montana Legislature were to make the policy decision to extend the power of eminent domain to CO₂ storage reservoirs, public interest and welfare criteria would have to be established in law and site suitability requirements not unlike the certification process in provided for in 82-10-304 and 82-10-305, MCA would have to be enacted.

Conclusion

The bulk of the analysis of this memorandum prior to the announcement of the EPA, would have involved analyzing issues such as immediate and long-term liability among the competing interests, regulatory siting and permitting, classification of CO2, resource protection (water and minerals), and long term monitoring. Until the EPA provides guidance on these issues, state policy initiatives are left in limbo.

 $^{^{10}}$ Id

¹¹ See 70-30-105 and 82-10-303, MCA

¹² See 70-30-102(43), MCA and 82-10-303, MCA

¹³ House Bill 24 (2007 Session)

¹⁴ See 82-10-302(2), MCA