



1044 N. 115 Street, Suite 400  
Omaha, Nebraska 68154-4446  
402-691-9500  
FAX: 402-691-9526

23 October 2008

Darrick W. Eugene  
General Counsel  
Texas Carbon Capture and Storage Association  
2801 Via Fortuna, Suite 100  
Austin, TX 78746-7568

Subject: Tenaska Comments on Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide Geologic Sequestration Wells; Proposed Rule

Dear Darrick:

Having reviewed the EPA's proposed rule and preliminary comments by TxCCSA members, Tenaska recognizes the importance of this rule to the near-term development of cost-effective Carbon Capture and Storage (CCS) for the power industry. Tenaska approaches the issue from the point of view of a developer of the first US electric generation facilities designed to capture carbon dioxide on a commercial scale. We currently are engaged in active development of two projects that would have this capability: The Taylorville Energy Center, in Illinois, and the Tenaska Trailblazer Energy Center, near Sweetwater, Texas. The ultimate geologic disposition of carbon dioxide produced from these projects is central to their potential success. The Proposed Rule is an important milestone in the creation of a regulatory structure that would enable permanent and safe geologic sequestration (GS).

Through our development work on CCS projects, Tenaska has developed a view that GS accomplished incidentally through enhanced oil recovery (EOR) activities could play a vital role in the early deployment of CCS in the United States. There are several reasons for this:

- Class II wells, in which carbon dioxide is injected in EOR operations, can be installed today under a long-established regulatory program that has been demonstrated to be protective of underground sources of drinking water (USDWs), public health, and the environment. For commercial CCS projects under development now, permits must be in place in the near term so that financing can be completed and construction may begin.
- Secondly, EOR may prove to be safer than deep saline aquifer injection of CO<sub>2</sub> and is certainly more proven. For example, removal of fluids from the target geologic reservoir during EOR operations reduces the risk of fluid displacement into USDWs.
- Third, EOR is informed and supported by oil industry experience over a period of decades, and is not an experimental procedure. The geologic data, trained manpower, engineering know-how, operational expertise, business structures, and regulatory capacity are in place to conduct successful GS/EOR efforts today.

- Fourth, Texas state tax policy has been enacted into law that is supportive of the use of anthropogenic carbon dioxide in EOR.
- Fifth and importantly, the economics of EOR help support carbon capture and sequestration investment. Effective incorporation of EOR could reduce the impact of CCS on the cost of electricity by as much as 50 percent, facilitating earlier deployment of commercial-scale CCS projects in the electric generation industry. EOR is the only economic alternative for GS in the foreseeable future.

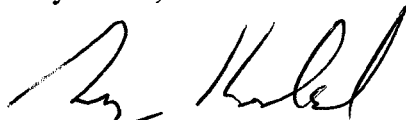
The USEPA has requested comment on a regulatory approach in which a new class of wells, Class VI, is created for wells whose principal purpose is GS and in which existing Class II wells could potentially be re-permitted under the proposed rule in order to receive a Class VI permit and, presumably, to have recognition of the functioning of the well for purposes of GS. Tenaska applauds EPA's work to provide the beginnings of a regulatory structure for GS. However, we do not anticipate that the suggested re-permitting of Class II wells in conformance with the proposed rule would be practicable and the opportunity presented by active and near-term prospective EOR operations for early, cost-effective GS would be lost if such a requirement was imposed.

From Tenaska's extensive discussions with oil producers, we are aware of their willingness to utilize anthropogenic CO<sub>2</sub> on a massive scale in the near term, but the purpose of sequestration cannot reasonably drive their complex EOR operations. A permitting procedure is needed in which Class II EOR wells are approved for purposes of GS during the productive period of the well field, adding only those requirements, such as monitoring, record-keeping, and reporting, deemed essential for documentation of the GS that occurs incidentally in current EOR operations. Carbon dioxide removed with produced oil, and subsequently re-injected, must be accounted for appropriately.

An important goal of the proposed rule is the promotion of carbon capture and storage. By taking the Class II well regulations as a starting point, and adding only provisions necessary for the documentation of GS, the USEPA could successfully promote CCS by encouraging the use of anthropogenic CO<sub>2</sub> in EOR operations.

Thank you for your efforts to compile comments on this rule for the Texas Carbon Capture and Storage Association.

Truly Yours,



Greg Kunkel, Ph.D.  
Vice President of Environmental Affairs  
Tenaska, Inc.

cc: Mr. Stephen Melzer, Melzer Consulting