

(17) Determination of CO₂ Storage Capacity and ECBM Potential of Lignite Coals

This three-year effort will seek to develop estimates of the gas content and CO₂ storage capacity of lignite coals in the Fort Union Group of the North Dakota and Montana portions of the Williston Basin and to determine the potential for application of the CO₂-based ECBM in those coals.

Total project cost: \$500,000

Funding request: \$400,000

Project Lead: University of North Dakota, Energy and Environment Research Center

Project Participants: North Dakota Industrial Commission Oil and Gas Division; the North Dakota Department of Commerce Division of Community Services, State Energy Program; and the Montana Board of Oil and Gas

Start Date: May 23, 2005

End Date: May 23, 2008

Presentations/Publications

None.

Patents

None.

Progress in Past Quarter and Current Status

The North Dakota State Land Department has granted the EERC an easement and other specific rights in North Dakota Trust Fund lands in Burke County to drill up to five test wells; install wellbore casing, water, gas, and CO₂ pipelines; and provide access for monitoring and collection of water and well data. Specific discussions were initiated with the Director of the North Dakota Industrial Commission Oil and Gas Division regarding a waiver of bonding requirements in the amount of \$50,000. As of the end of this quarter, no costs have been incurred to the project.

Plans for Next Quarter:

It is anticipated that formal cost-share agreements with the cost-share-providing partners will be finalized early in Quarter 3 of 2006. Finalized cost-share agreements will be submitted to NASEO for approval prior to the initiation of activities. Once the cost-share agreements are finalized and approved by NASEO, Task 1 activities will be immediately initiated. Because of the delayed start of the project activities, it is the intent of the EERC to condense the time frame for Task 1 – Field Site Selection. It is anticipated that the acreage that became accessible via the aforementioned North Dakota State Land Department agreement in Burke County, North Dakota, will be the focus of the field activities which will allow for completion of Task 1 activities early in Quarter 3. It is further anticipated that Task 2 sample collection activities will be initiated about midway through the third quarter of 2006.