

CARBON CAPTURE & SEQUESTRATION WORKING GROUP

MEETING MINUTES

February 3, 2010

I. CALL TO ORDER

Stephanie Timmermeyer, Chair, called to order the regular meeting of the **CCS Working Group** at **9:30 a.m. on February 3, 2010** at the headquarters of the West Virginia Department of Environmental Protection, 601 57th Street Southeast, Charleston, West Virginia. Agendas and previous minutes were distributed.

II. ROLL CALL

The following members were present: Stephanie Timmermeyer, Earl Melton, Leonard Knee, Paul Kramer, Cal Kent, Alan Dennis, David Flannery, Tim Mallan, Greg Wooten (proxy for Nick Carter), Dave McMahon, Jim Laurita, Dick Winschel, Vickie Wolfe, John Leeson, and Tim Grant, Vice Chair. Billy Jack Gregg Grant Bromhal and Ken Nemeth were absent.

The meeting was also attended by Laura Swingle, Christy Risch, Michael Hohn (WV Geologic Survey), and Jeff Knepper and Ken Ellison of DEP.

III. Review and approval of September 16 and December 9 Minutes

Tim Mallan asks that the December 9, 2009 minutes be amended to state that AEP is unsure whether any of the CO₂ will leave their property during the full scale injection project. A motion was made to approve the September 16, 2009 and the amended December 9, 2009 minutes.

- While awaiting the arrival of Sarah Smith, David Flannery gave a review of the Legal Subcommittee Progress.

IV. Guest Speakers

Sarah Smith – Kentucky Carbon Capture and Sequestration Working Group
(Will provide copy of report, may post on CCS Working Group web site)

The group examined the legal issues impacting CCS

➤ **Pore Space Ownership**

- Not appropriate for legislature to determine pore space ownership
- The ownership of minerals is severed (separate)
- The surface ownership should be taken into consideration
- Possibility of state to take ownership
 - Considered legally “A Taking”
 - Follow the same logic of air space

➤ **Access to Pore Space**

- Public utilities have the right to eminent domain
- Merchant plants and industry do not have the right to eminent domain
- Three possible methods of access for CO₂ storage

- Reverse Pooling
 - At least 51% to agree to pool entire area
 - No liability of storage activities to property owners
- Common Carrier Storage Facility
 - Offer storage capacity to anyone
 - Has ability to get eminent domain
 - Public Service Commission (PSC) to regulate rates
- Creation of Storage Facility
 - Create storage territories
 - State may earn fees on storage space
- **Legal Liability**
 - Long term storage – must move liability to an entity that will still be in existence for the life of closure.
 - European Union (EU) – appropriate for the liability and ownership be transferred to the public (state, federal or other) once the CO2 plume is considered stable.
 - State must have authority and funds
 - Fund structure needs to keep legislature from appropriating the money the fund accounts.
 - Fund accounts/long term liability may transfer to a federal entity.
- **Neighboring States**

Must converse with neighboring states about possible CO2 plume migration and come to conclusion and consensus about how to mandate and regulate those possibilities.

Presentation End – 11:05

Ken Ellison, Director, WVDEP Division of Land Restoration

Presentation on framework for pending WV DEP Land Stewardship Trust

- Risk-based clean-up
 - Clean hazardous content to irreducible limit
 - Allows residual contaminated media to be present
 - Engineering Controls
 - Design aspects to isolate hazardous materials at any particular site
 - Institutional Controls
 - How the site is used to prevent exposure to hazardous material and preserve isolation of material
 - Land Use
 - Change in ownership – change how land is used
 - Knowledge of prior hazardous use
 - Primary Mission of Stewardship
 - Tracking, maintaining and inspecting
- WV Voluntary Land Stewardship Program
- Link notice to title/deed of property
 - Notice to the owner that prior use created a hazardous situation
 - Board of Trustees & Management Company

- The Board oversees fund and program activities
- Management company manages fund and oversees property transactions
- The trust does not assume liability associated with properties
- Currently in the process of setting up a pilot for this program

Presentation End

James Martin, Chief, WVDEP Office of Oil and Gas

Discussion on Oil and Gas issues related to CCS

- Requirements for Drilling Well
 - Well location, notices, WV laws and regulations, well spacing, well type and location access.
 - Location is driven by geology and topography
- Discussion of well work permits
 - Site Characterization
- Well design

Discussion End

Kurt Waltzer, Clean Air Task Force (Columbus, OH office)

Sealing up CCS and Long Term Management (will provide pdf of presentation)

- Develop a framework to move CO2 capture forward
- Need to build infrastructure to handle rapid growth
- Scale-up beyond Department of Energy Phase III projects
- Develop regulations to complete tasks safely
- Generate public confidence/acceptance of technology
- Long-term site care
 - Avoid moral hazards

Midwest Governors Association Concept

- Geologic Sequestration Utility
 - May take a decade to fully develop a single storage site
 - Need multiple development of sites in service territory
 - Reduce complexity
 - Fee to cover management/liability
 - Oversight to PSC
- Property Rights Options
 - Pore space greater than 2,500 feet depth a public good for saline storage
 - Set per acre fee for compensation
 - Traditional unitization process

Indiana Concept

- Establish GSU framework for 3rd party operators
 - Certified territories (geology based)
 - Property rights (same authority as utilities)
 - DNR oversight
 - No rate recovery

- Allow self-serving entities to manage own CO2 outside GSU
- Senate Bill 115 Introduced

Wyoming-Montana

- Surface Ownership
 - May develop better public support
 - Vested interest
- Early projects easier
 - Ability to pick best suited geology – smaller plume footprint
 - Likely fewer landowners to deal with
- Later projects
 - Less optimal geology
 - More interested/concerned landowners

Presentation End – 2:00

V. Subcommittee Reports

Legal:

- Focusing on pore space issues
- Who owns it?
- Do they care who owns it
 - Florida pumps their municipal wastes underground
 - VA proposed Bill
- Wyoming & Montana
 - Establish ownership
 - Must secure pore space ownership
 - May use unitization

Feasibility:

- Working on draft report
- Serve as introduction for EG draft report
- Will circulate report when completed
- Identified several questions to refer to technical committee

Geology & Technology:

- Working on drafting answers to assigned and referred questions
- Develop outline-reviewed topics and supporting information.

VI. ANNOUNCEMENTS

- A. Sub-committee reports are due to Stephanie Timmermeyer by March 5, 2010.
- B. The next working group meeting is **Wednesday, April 21 at 9:30 a.m.** at DEP headquarters in Kanawha City.

VII. ADJOURNMENT

Tim Mallan moved that the meeting of the Working Group be adjourned, Greg Wooten seconded the motion, and it carried by a majority vote of the Working Group. The meeting was adjourned at 2:09 p.m.