## WESTERN KENTUCKY SEQUESTRATION SUB-PROJECT MEETING March 5, 2008 KGS Western Kentucky Office, Henderson

These people were present for the fourth meeting of this sub-project group:

#### KGS Staff

Dave Williams Jim Drahovzal Rick Bowersox Dave Harris Jim Cobb John Kiefer Brandon Nuttall Mike Lynch

### Smith Management Group Sara Smith

Karen Thompson

# E.ON US

Roger Medina Glenn Sundheimer Sharon Dodson via speaker ph.

## Sunshine Oil & Gas Chester Thomas

## URS

Mike Mujadin

Icon Construction Jesse Gump

### Geo Oil & Gas

Ross Miller via speaker phone

# UK CAER

Jim Hower

### **ConocoPhillips**

Michelle Pittenger Scott Rennie Paul Heard via speaker phone

## **Peabody Energy**

Dianna Tickner

After welcoming and introductions of all attendees, Jim Cobb told the group he had provided an update on the House Bill 1 projects to the Senate Committee on Economic Development the previous day.

#### Administrative update:

Dave Harris said the draft memorandum between UK / KGS and the "Western Kentucky carbon Storage Foundation, Inc." had received a few suggested changes from KGS and UK, particularly on the description of responsibilities, termination by partners and losses / liabilities. All agreed the changes improved the MOU.

There was a discussion of how the project expenses would be paid. It was agreed that KGS would, in general, pay for the first set of budgeted items up to the amount of the state funds committed to this project, while the industry partners would pay the remaining items.

Dave Harris said two new letters of participation were received from Chesapeake Energy, which is definitely interested in the Eastern Kentucky sequestration project and possibly the Western Kentucky one, and from Icon Construction.

Dave also said that the Illinois Office of Coal Development is asking for a proposal submission in order for Kentucky to receive the \$250,000 contribution promised by the state. There was a discussion of who (KGS or the Foundation) should actually prepare and send in the proposal. Dianna Tickner will call Bill Hoback to discuss this issue. (See Action Items at the end of meeting summary.)

Dave asked if there were objections to him giving a presentation on this project at Platt's Carbon Capture and Sequestration Conference in June in Houston. Jim Drahovzal also planned to do the same thing at the AAPG conference. All agreed the presentations won't be a problem.

There was a discussion of outreach costs and responsibilities. KGS agreed that this will be a part of the KGS contribution to the project.

Due to the type of well which will be drilled and its possible future use after the project completion, there was a discussion of the type of permit needed. There was agreement to keep the process as simple as possible and leave all potential options for the future of the well open. It was noted that the MOU between the partners does not preclude any possible future use of the well.

Dave Harris passed out the draft schedule and went over its major points. The partners agreed there needs to be a separate list of decision- and funding-dates in addition to the current scope of work. Dave H. will do this. (See Action Items.)

#### **ConocoPhillips Presentations**

Scott Rennie made a presentation on the costs of a new well vs. a re-entry project. (Paul Heard had made the calculations and estimations.) This presentation is available at the KYCCS.org web site. Scott noted the risks with a re-entry, including the greater possibility of a blowout, and an estimated 50% chance of success. Scott also compared the estimated costs of the potential projects, Hancock County re-entry (base cost \$8.2 million), Muhlenberg Count / Peabody (base cost \$7.3 million) and new well (base cost \$7.6 million).

He added that there is plenty of room to refine these numbers, and he still believes a new well can be drilled for 5 - 6 million. Paul Heard commented that the chance of success with a new well is nearly 100%, while a re-entry involves a number of risks and unknowns.

At that point, it was agreed that all the partners favor a new well most likely at the proposed site. The only disadvantage seen is that there may be no Mt. Simon formation available at this site.

Sara Smith said the lease on this land, broad as it is, does not mention carbon dioxide injection. It is important to perform due diligence to insure that the surface and mineral owners are clearly identified and to meet with and that a separate agreement specific to this project is made with every applicable owner. Ross Miller believes there should be no problem doing that. All agreed this should be done. (See Action Items.)

Michelle Pittenger made a presentation on the Knox petrophysics. In general, it demonstrated that better porosity will be found in the top 2000 feet of Knox.

#### Seismic update, KGS

Jim Drahovzal presented his latest information on the availability of the various formations at the proposed sites. Rick Bowersox made a presentation on the reasons that he and KGS recommend the proposed site, its multiple advantages and few disadvantages.

After lunch, a set of action items to be worked on by the partners were discussed (See Action Items.).

#### Next Meeting

Attendees agreed to meet again at 9:00 a.m. at the Well Sample and Core Library on Thursday, March 27, 2008. However, several people who cannot be there have asked to participate via conference call. ConocoPhillips and Peabody Energy will look into their corporate conference call setups.

## ACTION ITEMS Western Kentucky Sequestration Partnership Meeting March 5, 2008

## KGS:

## Dave Harris / Rick Bowersox

- 1. Prepare a separate scope of work with decision- and funding-dates.
- 2. First budget needed is for phase III (on the March 1, 2008 draft timeline), including seismic acquisition, processing, reprocessing (seismic line 7), permitting, due diligence work on title and lease, etc.
- 3. Gather information to determine who the operator/drilling supervisor might be: (i.e. ConocoPhillips, Sandia, Schlumberger, Texas World Operations, GeoConsultants, or Laurel O&G).
- 4. Continue seeking quotes on new seismic data acquisition after receiving safety criteria from ConocoPhillips.

### Dave Williams

5. Photos and assessment of domestic water wells, coordination with owner of specific potential sites

## Brandon Nuttall

6. Prepare permitting steps and costs

## Also

7. Determine availability of information on surface and groundwater monitoring and archaeological survey data at the Survey (i.e., ask Richard Smath, KGS about scanned site maps).

## Smith Management:

Sara Smith

1. Review the site lease, contact and work with GeoConsultants/GeoOil to determine and obtain all available information as to the ownership of all interests of the selected site. Develop a description of necessary due diligence and a description of issues to be addressed in an agreement with all property interest owners to permit the project to proceed at the site.

## **ConocoPhillips:**

Scott Rennie

1. Revisit hole design, construction, and testing.

## Michelle Pittinger

- 2. Assess line 7 data for efficacy of reprocessing
- 3. Provide company safety criteria to Dave Harris (See #4 under *Dave Harris* above.)

## **Peabody Energy:**

Dianna Tickner

- 1. Develop a scope of work for an environmental assessment.
- 2. Work with Bill Hoback (Illinois Office of Coal Development) to determine requirements for submitting a proposal for the Illinois contribution to this project.

## **GOEP / Smith Management / KGS:**

Talina Mathews; Sara Smith; Jim Cobb; Mike Lynch

1. Contact political leaders in host county; start development of publicity and outreach.