WESTERN KENTUCKY SEQUESTRATION SUB-PROJECT **MEETING**

July 24, 2008

KGS Well Sample and Core Library, Lexington, KY

These people were present for the meeting:

KGS Staff Smith Management

Dave Williams Karen Thompson

Dave Harris

Rick Bowersox **Sandia Technologies** Phil Papadeas Mike Lynch

ConocoPhillips EnSafe Inc.

> Shane Goodnight Paul Heard

sgoodnight@ensafe.com Michelle Pittenger

E.ON US **Geo Consultants**

> Roger Medina Ross Miller

Dave Williams opened the meeting with the introduction of Shane Goodnight of EnSafe, who explained that EnSafe is interested in the project. EnSafe performs environmental consulting services.

Status of Agreements:

Dave Williams reported that the property owner has agreed in principle to all the items in the property lease, and the title search has been completed on the drill-site tract, site #48. He will send copies to the Consortium members when he receives it. The title attorney is still working tract #49, which is not as important as #48. He added that the data sharing agreement with R & B is still at UK's legal office, but there should be no problems with it.

Funding Contracts:

Dave Harris indicated that the application to the Illinois Office of Coal Development for \$250,000 for well-logging by Schlumberger was submitted about a week and a half ago. He's hoping for a quick turn-around.

Michelle Pittenger said that Duke Energy has allowed ConocoPhillips access to data from its Gibson County 11,000-foot-deep well, but has not allowed that access to the Foundation or the Consortium. They have been offered membership in the Consortium in exchange for the data.

Status of bids for services:

The project management bid by Sandia Technologies has been approved by the University of Kentucky, and Phil Papadeas will be the primary contact. Papadeas indicated UK and Sandia are in the process of signing the final contract documents.

GeoSciences Inc. of Georgetown (Ky.) has been selected to do the Phase I environmental assessment of the site. A contract for the work has been submitted to the UK legal office.

Rick Bowersox said a contractor for the seismic program work has been selected, but he is not in a position yet to identify the company. A contract must be submitted to UK on this work as well.

Paul Heard indicated that road construction to the site should begin in September or October. Dave Williams added that Ed Woolery of KGS has begun the shallow seismic work at the site and explained the shear-wave and P-wave lines Woolery plans to run across the well site. The data should take a couple of weeks to process.

Mike Lynch summarized his plan to prepare a news release to be sent out to the media when the site lease and data-sharing contracts have been signed. It will announce that the project is in a position to begin.

Presentation by Sandia Technologies

Phil Papadeas made a presentation on project management and the permitting process. The presentation is available at the KYCCS.org web site. These are the topics he addressed:

A meeting is scheduled August 12 with the Region IV EPA in Atlanta to introduce the project to EPA.

Since this is a new process for that EPA office with few similar wells in the region, there are questions about how Region IV will apply its existing rules and its proposed rules on carbon dioxide sequestration wells to this project.

The Consortium should emphasize to EPA that this is a limited test project and should propose the injection of more carbon dioxide than will actually be used.

Because EPA's process is slow and deliberate, getting an application completed and submitted early is important.

It was agreed that the well could be drilled under a state permit as a gas or oil exploration well while the EPA permit for injection is pending, and that the support of political leaders for the EPA application could help to move it efficiently.

Phil indicated he hopes to be able to submit the application to EPA in mid or late September. He suggested that those who will go to Atlanta should meet immediately after this meeting or some other time before the August 12 meeting to prepare.

Dave Harris commented that KYCCS may want to submit comments to EPA on the agency's proposed rule for the drilling of permanent carbon dioxide storage wells. He asked the members to submit any such comments to him.

Sara Smith came to the meeting for a short time to say that she has submitted a proposal to the newly-formed Department for Energy Development and Independence for \$120,000 for education projects relating to KYCCS work. She said \$20,000 had been set aside for KGS for travel, graphic and presentation design, etc. She added that the application also proposed statewide public forums on carbon storage topics and presentations before a variety of meetings and conferences. She is awaiting word on its approval status.

Mike Lynch explained that he and Dave Harris had promoted a teacher workshop in Illinois on climate change / carbon storage topics, and four Kentucky teachers have registered for it.

Drilling project status

Dave Williams said the specific location for the well has been agreed on, and surveyors will be asked to do the necessary survey of the property soon.

The property owner told him the Marathon pipeline right of way is 50 feet along their major gas line thought the property, and this should not be a problem for the project, though Marathon should be notified of the work being done.

Dave Harris said the baseline soil gas and groundwater monitoring in the project area being done by KGS staff should start in September.

Paul Heard gave a brief update on the construction plan development.

On the permitting procedures, Rick Bowersox said he has sent a package of information on the project to the Region IV EPA office in Atlanta. He has also talked to the state Division of Water about a storm water management permit, which Karen Thompson said involves a short online application which mostly deals with best management practices (silt fences, other soil-erosion reduction procedures, etc.) if, in fact, such a permit is needed.

Dave Williams has been consulting with a Kentucky Division of Oil and Gas official in western Kentucky for assistance on getting the necessary state permit for the project. KGS has researched the specific location of the well, and the location meets state requirements for distance from other wells.

Dave Harris noted that an Appalachian Basin Partnership has recently posted a number of well logs on their website which may be of interest to the partnership and helpful for the project. He also said KGS needs to follow up on the possible availability of data on the DuPont well in Louisville.

Michelle Pittenger said ConocoPhillips is still working on reprocessing earlier seismic data from the area around the project.

The next meeting was set for August 21 at 9:00 a.m. at the KGS Well Sample and Core Library.

After lunch, Michelle Pittenger made a presentation on a study of the Knox formation.

ACTION ITEMS:

ConocoPhillips:

Scott Rennie will continue to seek access to the data from the Duke Energy Gibson County well for the entire partnership (not just ConocoPhillips).

ConocoPhillips staff will complete the re-processing of existing seismic data for the project area.

KGS:

Ed Woolery will complete the shallow seismic work with the help of UK students.

Mike Lynch will develop a news release to disseminate when the property lease and data-sharing contracts are completed.

Dave Williams will send a copy of the property title opinion to the partners and ask that a survey be done on the site property.

Marty Parris and other KGS staff will start soil gas and groundwater sampling and monitoring in September.

Dave Harris will follow up on whether data on the Louisville DuPont disposal well is available.

He will also attach a total dollar value to Phase III of the project when all of the new contracts have been finalized and signed (i.e., project management, seismic program, etc.)

Partnership:

Interested members will attend an August 12 introductory project meeting in Atlanta with EPA Region IV staff to discuss the permitting process.

They will also get together before the Atlanta meeting (possibly immediately after this meeting, July 24) to plan the Aug. 12 meeting.

Sandia Technologies:

Phil Papadeas will seek any public data available on Duke Energy's Gibson County, IN well via FOIA request.

He plans to submit the permit application to EPA with a target time of middle to late September.