Fossil Energy
Studies for the next 6 months

Carbon Capture and Storage (CCS) Studies Expected From DOE/NETL from December 2008-June 2009

Storage Related Studies

- Quarterly Reports from the Seven Carbon Sequestration Regional Partnerships (end of December 2008, end of March, 2009 and end of June, 2009) The purpose of these quarterly reports is to provide updates on major aspects of both the small and large scale field tests conducted by DOE/NETL and their partners. Updates on permitting status, injection and other issues are covered in these reports.
- "Monitoring, Verification, and Accounting of CO2 Stored in Deep Geologic Formations" (April, 2009) The purpose of this report is to is to describe the CSRP large scale field test program, what its goals are, and the best scientific and operational practices being used to accomplish those goals.
- Updated "Carbon Sequestration Technology Roadmap and Program Plan" (May, 2009) The purpose of this report is to present an overview of the CCS program and to describe the research pathways that will e used to achieve program goals. Information on key contacts and web links related to the program are also included.
- "CCS: Site Selection and Characterization Opportunities", June, 2009. The purpose of this report is to summarize the site selection process used by the CSRP to site both their large and small scale field tests.

CO2 Capture Related Studies

<u>Integrated Gasification Combined Cycle (IGCC) CO2 Capture Studies</u>

High/Warm temperature solid sorbents for IGCC pre-combustion CO2 capture. This technology is currently under development by NETL.
The purpose of this study is to perform a systems analysis on the most recent high performing high/warm temperature solid sorbents being developed for IGCC applications by NETL. New sorbents include those used for multi-pollutant control in addition to CO2 capture. (June, 2009)

Iron-based Chemical Looping Gasification. The purpose of this study is to provide an assessment of the performance and economic impact of capturing various levels of CO2 capture**.** Ohio State University is a participant in this effort. (June, 2009).

<u>Existing Plant Program CO2 Capture Studies</u>

Carbon Dioxide Capture Sensitivity Analysis (Pre- and Post-combustion)
The purpose of this study is to assess the performance and economic impact of capturing various levels of carbon dioxide from Pulverized Coal (PC) power plants using amine scrubbing, from IGCC pre-combustion using Selexol and IGCC post combustion using amine scrubbing. (June, 2009)

CO2 Capture Solid Sorbents and Ionic Liquids The purpose of these studies is to assess the performance and economic impact of capturing various levels of carbon dioxide using these technologies from Pulverized Coal (PC) power plants. (June, 2009)