

## Monitoring, Verification, Accounting, and Assessment Archived Projects

Title	Performer	Last Update
Ambient PM 2.5 Air Sampling & Analysis – The Upper Ohio River Valley Project	ATS-Chester Engineers / Desert Research Institute	9/15/1998
<a href="#">Steubenville Comprehensive Air Monitoring Program</a>	CONSOL Energy Inc. / Wells Cargo / Air Quality Sciences, Inc. / Wheeling Jesuit University / Saint Vincent College / Franciscan University of Steubenville / Optimal Technologies Inc. / Harvard School of Public Health / Ohio University	3/8/2000
<a href="#">National Carbon Sequestration Database and Geographical Information System (NATCARB)</a>	University of Kansas Center for Research	9/27/2000
Environmental Regulatory Analysis	Argonne National Laboratory	1/15/2003
<a href="#">Direct Measurement of Mercury Reactions in Coal Power Plant Plumes</a>	Electric Power Research Institute / Frontier Geosciences, Inc. / University of North Dakota Energy and Environmental Research Center	3/18/2003
<a href="#">Evaluation of the Emission, Transport, and Deposition of Mercury, Arsenic, and Fine Particulate Matter From Coal Based Power Plants in the Ohio River Valley Region</a>	Ohio University / Atmospheric & Environmental Research, Inc. / CONSOL Energy Inc. / ATS-Chester Engineers	4/3/2003
Exploratory Measurements of Hydrate and Gas Compositions	Lawrence Livermore National Laboratory	9/30/2003
Review of State Regulations, Standards, and Practices Related to the Use of Coal Combustion Products	University of North Dakota Energy and Environmental Research Center	9/14/2004
Zero Emissions Research & Technology Center (PNNL)	Pacific Northwest National Laboratory	9/30/2004
Modeling the Resolution of Inexpensive, Novel Non-Seismic Geophysical Monitoring Tools to Monitor CO <sub>2</sub> Injection into Coal Beds	Lawrence Berkeley National Laboratory	3/9/2005
<a href="#">Instrumentation Systems for Monitoring and Verifying Carbon Sequestration in Terrestrial Systems</a>	Zimmerman Associates, Inc.	4/12/2005
Reactive, Multi-phase Behavior of CO <sub>2</sub> in Saline Aquifers Beneath the Colorado Plateau	University of Utah	6/30/2005
Near Surface Measurement, Monitoring, and Verification (MMV) for the Midwest Geological Sequestration Consortium	Lawrence Berkeley National Laboratory	10/1/2005
SE Partnership Monitoring Studies	Lawrence Berkeley National Laboratory	10/1/2005
Southeast Regional Partnership Phase II: Gulf Coast Geological Storage Monitoring Support	Lawrence Livermore National Laboratory	10/1/2005
Existing Plant Technology Management Support	RDS, LLC	12/1/2005
<a href="#">Natural Analogs for Geologic Sequestration</a>	Advanced Resources International	3/1/2006
<a href="#">A Sea Floor Gravity Survey of the Sleipner Field to Monitor CO<sub>2</sub> Migration</a>	SCRIPPS (Scripps Institute of Oceanography)	3/1/2006
<a href="#">Validation of Fireside Performance Indices</a>	University of North Dakota Energy and Environmental Research Center	4/1/2006
Field-Deployable Gas Analyzer for MMV Applications	Los Gatos Research	6/28/2006
Fault Geomechanics and Carbon Dioxide Leakage Applied to Geologic Storage	Lawrence Livermore National Laboratory	11/1/2006
Development of Novel Monitoring Tools for Geologic Sequestration	Los Alamos National Laboratory	7/1/2007
<a href="#">Application of Low-Cost Digital Elevation Models to Detect Change in Forest Carbon Sequestration Projects</a>	Winrock International	7/31/2007

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BNL: In Field, Continuous, Non-Invasive Soil Carbon Scanning System	Brookhaven National Laboratory	9/30/2007
Illinois Basin Partnership Phase II Reactive Transport Modeling	Lawrence Livermore National Laboratory	10/1/2007
<a href="#">Carbon Sequestration in Reclaimed Mine Soils of Ohio</a>	Ohio State University	12/31/2007
Sequestration of CO <sub>2</sub> in a Depleted Oil Reservoir	Sandia National Laboratories	3/31/2008
Sequestration of CO <sub>2</sub> in a Depleted Oil Reservoir - LANL	Los Alamos National Laboratory	3/31/2008
<a href="#">Development of a Carbon Management Geographic Information System (GIS) for the United States</a>	Massachusetts Institute of Technology	4/1/2008
<a href="#">Weyburn Carbon Dioxide Sequestration Project</a>	NR Canada - Canmet Energy PTRC	4/1/2008
Nepa Environmental Assessments For Regional Carbon Sequestration Field Projects	Mangi Environmental Group, Inc.	5/13/2008
<a href="#">Stored CO<sub>2</sub> and Methane Leakage Risk Assessment and Monitoring Tool Development: CO<sub>2</sub> Capture Project Phase 2</a>	BP North America	6/8/2008
<a href="#">Application and Development of Appropriate Tools and Technologies for Cost-Effective Carbon Sequestration</a>	The Nature Conservancy	7/10/2008
Carbon Sequestration Monitoring Activities	University of Wyoming	9/1/2008
Assessing Fossil Fuel and Recent Carbon Pools in Reclaimed Mined Soils	Ohio State University	9/30/2008
<a href="#">Low Cost Open-Path Instrument for Monitoring Atmospheric Carbon Dioxide at Sequestration Sites</a>	California Institute of Technology	9/30/2008
<a href="#">Basic Science of Retention Issues, Risk Assessment &amp; Measurement, Monitoring, &amp; Verification for Geologic CO<sub>2</sub> Sequestration</a>	Montana State University	4/1/2009
<a href="#">Leveraging Regional Exploration to Develop Geologic Framework for CO<sub>2</sub> Storage in Deep Formations</a>	Battelle Memorial Institute	4/1/2009
<a href="#">Computed Tomography (CT) Scanning for Petrophysical Applications</a>	University of Pittsburgh Carnegie Mellon University Georgie Institute of Technology West Virginia University	8/1/2009
<a href="#">Development of Comprehensive Monitoring Techniques to Verify the Integrity of Geological Sequestration Reservoirs Containing Carbon Dioxide</a>	Carnegie Mellon University Los Alamos National Laboratory Sandia National Laboratory West Virginia University	8/1/2009
<a href="#">Zero Emissions Research and Technology (ZERT) II - Investigating the Fundamental Scientific Issues Affecting the Long-term Geologic Storage of Carbon Dioxide</a>	Montana State University - Montana Hall	4/1/2010
<a href="#">Oak Ridge National Laboratory - GEOSEQ: Monitoring of Geological CO<sub>2</sub> Sequestration Using Isotopes and Perfluorocarbon Tracers (PFTs)</a>	Oak Ridge National Laboratory - ORNL	5/31/2010
<a href="#">New Approach for Long Term Monitoring of Potential CO<sub>2</sub> Leaks from Geologic Sequestration</a>	Brookhaven National Lab (BNL)	7/1/2010
<a href="#">Measurements of <sup>222</sup>Rn, <sup>220</sup>Rn, and CO<sub>2</sub> Emissions in Natural CO<sub>2</sub> Fields in Wyoming</a>	University of Wyoming	7/31/2010
<a href="#">Space Geodesy and Geochemistry Applied to the Monitoring, Verification of Carbon Capture and Storage (CCS): Training and Research</a>	University of Miami	7/31/2010

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<a href="#">Integrated Reflection Seismic Monitoring and Reservoir Modeling for Geologic CO<sub>2</sub> Sequestration</a>	Fusion Petroleum Technologies	8/1/2012
<a href="#">Development of a 1 x N Fiber Optic Sensor Array for Carbon Monitoring</a>	Montana State University	8/1/2012
<a href="#">Improving the Monitoring, Verification, and Accounting of CO<sub>2</sub> Sequestered in Geologic Systems with Multicomponent Seismic Technology and Rock Physics Modeling</a>	University of Texas at Austin - BEG	8/1/2012
<a href="#">Advanced Technologies for Monitoring CO<sub>2</sub> Saturation and Pore Pressure in Geologic Formations: Linking the Chemical and Physical Effects to Elastic and Transport Properties</a>	Stanford University	8/31/2012
<a href="#">Combining Space Geodesy, Seismology, and Geochemistry for Monitoring, Verification and Accounting of CO<sub>2</sub> in Sequestration Sites</a>	University of Miami	8/31/2012
<a href="#">Near-Surface Leakage Monitoring for the Verification and Accounting of Geologic Carbon Sequestration Using a Field Ready <sup>14</sup>C Isotopic Analyzer</a>	Planetary Emissions Management	8/31/2012
<a href="#">Quantification of Wellbore Leakage Risk Using Non-Destructive Borehole Logging Techniques</a>	Schlumberger Carbon Services	8/31/2012
<a href="#">Tagging Carbon Dioxide to Enable Quantitative Inventories of Geologic Carbon Storage</a>	Columbia University	8/31/2012
<a href="#">Feasibility of Geophysical Monitoring of Carbon-Sequestered Deep Saline Aquifers</a>	University of Wyoming	12/1/2012
<a href="#">In Situ MVA of CO<sub>2</sub> Sequestration Using Smart Field Technology</a>	West Virginia University	12/31/2012
<a href="#">Double-Difference Tomography for Sequestration Monitoring, Verification, and Accounting (MVA)</a>	Virginia Polytechnic Institute	2/28/2013
<a href="#">Development and Test of a 1000 Level 3C Fiber Optic Borehole Seismic Receiver Array Applied to Carbon Sequestration</a>	Paulsson Inc.	5/31/2013
<a href="#">Modeling and Evaluation of Geophysical Methods for Monitoring and Tracking CO<sub>2</sub> Migration in the Subsurface</a>	Ohio State University	6/30/2013
<a href="#">Passive Wireless Acoustic Wave Sensors for Monitoring CO<sub>2</sub> Emissions for Geological Sequestration Sites</a>	University of Pittsburgh	6/30/2013
<a href="#">Training Toward Advanced 3-D Seismic Methods for CO<sub>2</sub> Monitoring, Verification, and Accounting</a>	University of Houston	6/30/2013
<a href="#">Development and Deployment of a Compact Eye-Safe Scanning Differential Adsorption LIDAR (DIAL) for Spatial Mapping of Carbon Dioxide for MVA at Geologic Carbon Sequestration Sites</a>	Montana State University	9/30/2013