OCTOBER 2011 VOLUME 9

# CCS REGULATION

### NEWSLETTER

Welcome to the CCS Regulation newsletter. This is produced by the MIT Carbon Capture and Sequestration Technologies Program. It is a quarterly report designed to keep the reader up to date with the current regulatory news and issues surrounding Carbon Capture and Storage (CCS). For more information about the program please see <a href="http://sequestration.mit.edu">http://sequestration.mit.edu</a>

# Federal CCS Regulation News and Updates

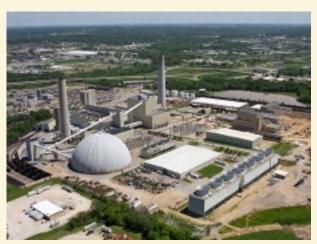
#### News

August 8, 2011. The EPA has proposed to exclude  $CO_2$  streams from the EPA's hazardous water regulations. This is provided that the  $CO_2$  stream meets certain conditions. The proposal includes geologic sequestration into specific wells currently regulated under the Safe Drinking Water Act. The EPA includes that the act or management of carbon sequestration, as the EPA has outlined, does not pose a major risk to either human or environmental health.

http://www.epa.gov/wastes/nonhaz/industrial/geosequester/

July 1, 2011. Six months after the EPA's first round of climate change regulations started, the rules requiring new power plants and factories to obtain permits for their greenhouse gas emissions are being expanded to more facilities. Any new or modified facility that emits more than 75,000 to 100,000 tons of CO<sub>2</sub> will now require an air pollution permit.

http://www.nytimes.com/gwire/ 2011/07/01/01greenwire-with-start-of-july-morefacilities-need-co2-pe-76189.html



Archer Daniels Midland plant where construction started on its CO<sub>2</sub> capture unit in August 2011.

#### **Table of Contents**

#### **Regular Features**

•	Federal CCS Regulation Newspage	1
•	State CCS Regulation Updatespage 2	)

#### News

Publications and Releases	.page	2
▶ International News	.page	3
CCS Project News	.page	4

OCTOBER 2011 VOLUME 9

### CCS REGULATION NEWSLETTER

# Federal CCS Regulation News and Updates Continued

#### **Federal Bill Updates**

June 17, 2011. The Congressional Budget Office (CBO) released its cost estimate for S.757, *The Carbon Dioxide Capture Technology Prize Act of 2011*. S.757 would authorize appropriations for the DOE to provide competitive financial awards to support the development of advanced technologies to capture CO<sub>2</sub> from the atmosphere. Because the bill also would reduce an existing authorization of appropriations for other activities, the CBO estimates that implementing S.757 would have no significant net impact on discretionary spending over the 2012-2016 period. <a href="http://www.govtrack.us/congress/billreport.xpd?">http://www.govtrack.us/congress/billreport.xpd?</a>

July 25, 2011. US State Utility Regulators called for more CCS-EOR projects. Members of Congress supported a new national EOR initiative that brings together a diverse group of industry, state officials, technical experts and NGOs to identify ways to expand domestic oil production through anthropogenic sourced CO<sub>2</sub> EOR. <a href="http://www.carboncapturejournal.com/displaynews.php?">http://www.carboncapturejournal.com/displaynews.php?</a> <a href="http://www.carboncapturejournal.com/displaynews.php?">NewsID=821</a>

# State CCS Regulation News and Updates

#### Michigan

June 29, 2011. Michigan approved the first Federal air permit for a coal fired power plant under the EPA's new climate regulations. The permit allows Wolverine Power Supply Cooperative to build a 660 MW power plant. http://www.eenews.net/public/eenewspm/2011/06/29/1?page\_type=print

#### Illinois

August 24, 2011. Illinois Governor Pat Quinn, signed S.B.1821: *The CO<sub>2</sub> Transportation and Sequestration Act*. This Bill was passed earlier this year and will allow  $CO_2$  pipelines to use private property. This allows CCS projects like FutureGen 2.0 to continue.

Full text of final Bill: <a href="http://www.ilga.gov/legislation/publicacts/fulltext.asp?">http://www.ilga.gov/legislation/publicacts/fulltext.asp?</a>
<a href="http://www.ilga.gov/legislation/publicacts/fulltext.asp?">http://www.ilga.gov/legislation/publicacts/fulltext.asp?</a>
<a href="http://www.ilga.gov/legislation/publicacts/fulltext.asp?">http://www.ilga.gov/legislation/publicacts/fulltext.asp?</a>
<a href="http://www.ilga.gov/">Name=097-0534</a>

#### Publications and Releases

October 4, 2011. The Global CCS Institute released *The Global Status of CCS: 2011 Report*. This document is the Institute's flagship publication and consolidates the current understanding of the level and nature of global CCS activities, as well as the major opportunities and challenges experienced by large-scale integrated CCS projects worldwide.

http://www.globalccsinstitute.com/publications/global-status-ccs-2011

October 13, 2011. The IEA International CCS Regulatory Network has released its *Carbon Capture and Storage and the London Protocol: Options for enabling transboundary CO*<sub>2</sub> *transfer.* 

http://www.iea.org/publications/free\_new\_Desc.asp?PUBS\_ID=2446

July 15, 2011. The Southern States Energy Board (SSEB) released two new legislative and regulatory studies for distribution at its briefing to legislative members in Memphis, Tennessee. *Carbon Capture and Sequestration Legislation in the United States of America* provides a summary of four key areas identified as necessary elements of a broader comprehensive regulatory framework governing CCS activities.

http://www.secarbon.org/files/CCS\_Legislation\_2011.pdf

## CCS REGULATION NEWSLETTER

#### International Regulation News

#### EU

June 29, 2011. The UK, France and Spain lead 12 of the EU's 27 nations in meeting a deadline to adopt a law governing the underground storage of CO<sub>2</sub>.

The <u>directive</u> 2009/31/EC lays down requirements for the lifetime of a storage site. It guides on measures to be taken in case of  $CO_2$  leakage and responsibility for the storage sites once they are closed. No geological storage of  $CO_2$  will be allowed without a storage permit, according to the directive.

http://www.bloomberg.com/news/2011-06-29/u-k-france-spain-lead-12-eu-nations-meeting-ccs-law-deadline.html

#### **Bulgaria**

August 18, 2011. Bulgaria will draft a law on capturing and storing CO<sub>2</sub> emissions from power plants and other facilities in order to fulfill the requirements laid out in several EU directives, otherwise it may face a €777,000 fine from Brussels.

http://www.captureready.com/EN/Channels/News/showDetail.asp?obilD=2423&isNew

#### **COP 17**

September 13, 2011. The seventeenth conference of the parties (COP 17) negotiations on climate change in Durban were viewed as key for making decisions if CCS would be accepted under the Clean Development Mechanism (CDM). It is hoped that CCS can be accepted under a reformed CDM.

http://www.engineeringnews.co.za/article/cop-17-key-for-decision-on-carbon-captures-inclusion-under-cdm-2011-09-13

#### **Australia**

July 1, 2011. Australia's Government announced its plan to implement a carbon tax plan beginning July 1, 2012. The carbon price is to be AUD \$23 per ton of  $CO_2$  which will rise by 2.5% each year until a full trading scheme is introduced in 2015. The estimated \$2 billion annual revenue from the scheme is to be directed into renewable energy funds.

http://www.carboncapturejournal.com/displaynews.php?NewsID=814

#### Germany

July 8, 2011. The German Parliament has approved testing CCS technology. The legislation also allows for EU funding to test CCS technology. This decision follows one week after the parliament voted to phase out nuclear power in Germany in the next decade. The legislation still requires the approval from Germany's second legislative chamber, which represents the interests of the states. <a href="http://www.spiegel.de/international/germany/">http://www.spiegel.de/international/germany/</a> a-773196.html

#### Canada

August 22, 2011. The Canadian Government has initiated the process to regulate emissions from its coal fired electricity sector. The proposed regulations limit the emission of  $CO_2$  at 375 tons for each GWh of electricity produced by a unit during a year. The regulations are to come into effect on July 1, 2015.

http://www.canadianbiomassmagazine.ca/content/view/2723/57/

OCTOBER 2011 VOLUME 9

### CCS REGULATION NEWSLETTER

#### **CCS Project News**

**Mountaineer, USA**: July 14, 2011. AEP shelved plans for the large scale CCS project at its WV Mountaineer plant. AEP cited the lack of a clear climate policy in Congress as the key barrier.

http://www.dispatch.com/content/stories/business/2011/07/14/aep-set-to-shelve-carbon-capture.html

Archer Daniels Midland, USA: August 26, 2011. Construction has started at the Archer Daniels Midland plant, Illinois. The \$208M large scale industrial CCS project will capture and store 1 MT CO<sub>2</sub>/Yr produced as the result of processing corn into fuel-grade ethanol.

http://carbon.energy-business-review.com/news/doestarts-construction-of-iccs-facility-in-illinois-250811

**SWP, USA:** August 12, 2011. The Southwest Regional Partnership (SWP) and Thunderbird Energy have started field operations at Gordon Creek. The \$90M project plans to store 1 MT CO<sub>2</sub>/Yr.

http://carbon.energy-business-review.com/news/ thunderbird-starts-field-operations-at-ccs-project-inus-120811

**TCEP, USA:** July 25, 2011. Summit Power Group and Blue Strategies have agreed to sell CO<sub>2</sub> from Texas Clean Energy Project to Whiting Petroleum for EOR.

http://www.carboncapturejournal.com/displaynews.php? NewsID=822

**DOE Awards:** July 29, 2011. Big Sky Sequestration Partnership was awarded \$67M for the CCS pilot project at Kevin Dome, Montana.

http://www.bigskyco2.org/research/geologic/kevinstorage

August 15, 2011, The US DOE awarded \$52M to 4 projects to develop advanced CCS technologies. One of these projects is

Southern Company's 25 MW Plant Barry in AL. <a href="http://www.carboncapturejournal.com/displaynews.php?">http://www.carboncapturejournal.com/displaynews.php?</a> NewsID=830

Quest, Canada: June 24, 2011. The Province of Alberta and the Canadian Federal Government have committed \$865M to fund 60% of the Quest CCS project at Shell's Scotford Upgrader in Alberta over a 15 year period.

http://www.vancouversun.com/life/environment/Alberta +federal+government+commit+million+carbon+capture +scheme/5002347/story.html

**Boundary Dam, Canada:** July 04, 2011. Cansolv received approval for the construction of the 150 MW retrofit CCS at The Boundary Dam power station in Saskatchewan, Canada. <a href="http://www.carboncapturejournal.com/displaynews.php?">http://www.carboncapturejournal.com/displaynews.php?</a> NewsID=809

**Swan Hills, Canada:** July 27, 2011. The Alberta Government awarded \$285M to the Synfuels Swan Hills CCS project due to begin in 2013.

http://www.carboncapturejournal.com/displaynews.php? NewsID=824

**Porto Tolle, Italy:** July 7, 2011. After Italy's top court cancelled Enel's Porto Tolle's government clearance in May, Enel hopes a new regional law will help move the project forward.

http://uk.reuters.com/article/2011/07/07/enel-portotolle-conversion-idUKLDE7661B620110707

**Netherlands:** August 11, 2011. The Dutch top court has ordered the suspension of the 4.1 billion cubic meter Bergermeer gas storage project following objections by environmentalists and local residents.

http://www.reuters.com/article/2011/08/08/us-dutch-gas-idUSTRE7772GS20110808

#### Images:

Page 1: Archer Daniels Midland plant http://thegazette.com/2010/08/03/admreports-higher-profits-new-ethanol-plant-running/ This newsletter was constructed using information from internet searches.
All the websites used have been cited.

Holly Javedan compiled this report. For more information, questions and comments please email <u>javedan@mit.edu</u>. Thank you.