



Air Resources Board



Matthew Rodriguez
Secretary for
Environmental Protection

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Edmund G. Brown Jr.
Governor

January 21, 2016

Dear Sir or Madam:

The California Air Resources Board (ARB) staff invites you to participate in a public workshop to launch the development of ARB's Carbon Capture and Sequestration (CCS) program. Carbon capture and sequestration has the potential to deliver significant Greenhouse Gas (GHG) emissions reductions and is a prospective strategy for meeting California's long-term climate goals. In order to advance CCS policy in California, ARB needs to understand the ability of CCS to contribute to climate goals, the limitations or advantages of the technology, and the innovation and incentives necessary for adoption. The ARB CCS program will include, but is not limited to, an understanding of:

- The extent to which carbon capture technology and implementation can become economically viable;
- The availability, capacity, and location of suitable geologic pore space for carbon dioxide (CO₂) in California;
- The potential of additional CO₂ storage or utilization options (e.g. cement) beyond geologic sequestration; and
- The potential for unintended impacts of policy decisions related to broad CCS deployment.

A necessary first step will be the development of an appropriate CCS Quantification Methodology for CCS projects. The CCS Quantification Methodology will provide a pathway for CCS projects to potentially participate in ARB's Cap and Trade and Low Carbon Fuel Standard Programs, with an initial focus on geologic sequestration (including saline reservoir and CO₂ enhanced oil recovery). The Quantification Methodology will ensure that CCS projects meet the rigorous standards of Assembly Bill 32, The Global Warming Solutions Act of 2006 (AB 32, Statutes of 2006, Chapter 488) requiring that GHG emissions reductions achieved are real, permanent, quantifiable, verifiable, enforceable, and, for market-based programs, additional. With these principles in mind, the CCS Quantification Methodology will include, at a minimum, a GHG accounting methodology and requirements for CO₂ injection site selection, reservoir characterization, CO₂ injection, post-injection site care or closure, monitoring, reporting, and verification.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

At the workshop, ARB staff will present an overview of CCS; define the purpose and scope of CCS Quantification Methodology; and provide the basic structure and timeline for the overall CCS program. The workshop will include presentations by the California Energy Commission, describing the California-specific work generated through WESTCARB; and the U.S. Department of Energy (DOE), providing an overview of its CCS research and demonstration program as well as Best Practice Manuals on geologic carbon storage. In addition, the workshop will include an opportunity for questions, feedback, and presentations by stakeholders and members of the public. Following the workshop, stakeholders and members of the public may send additional feedback.

Prior to the workshop, an agenda, staff presentations, and any supporting information will be posted at <http://www.arb.ca.gov/cc/ccs/ccs.htm>.

The workshop will be held at the following time and location:

DATE: February 12, 2016
TIME: 9:00 a.m. to 1:00 p.m.
LOCATION: Sierra Hearing Room
ADDRESS: Cal/EPA Headquarters Building
1001 "I" Street
Sacramento, California 95814

Directions to the California Environmental Protection Agency (Cal/EPA) headquarters and public transit can be found at the Cal/EPA website at <http://www.calepa.ca.gov/epabldg/location.htm>.

This workshop will be webcast. You may access the webcast at <http://www.calepa.ca.gov/broadcast/?BDO=1>. During the webcast, we will accept feedback and questions sent via email to sierrarm@calepa.ca.gov. After the workshop, you may submit feedback directly to Ms. Johanna Levine at Johanna.Levine@arb.ca.gov.

You may participate in this workshop by teleconference by dialing **888-455-9651** (for domestic) or **1-630-395-0303** (for international), give the participant code: **4763326** and leader name: **Ms. Elizabeth Scheehle**. Please note that if you call internationally, it is a toll call.

If you require special accommodation for the scheduled meeting or need this document in an alternate format (e.g., Braille, large print) or another language, please contact Ms. Regina Cornish at (916) 327-1493 as soon as possible. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

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We welcome and encourage your participation in this effort. If you have questions about the workshop, please contact me at (916) 322-6312 or via email at Elizabeth.Scheehle@arb.ca.gov, or Ms. Johanna Levine, Staff Air Pollution Specialist, Emerging Technology Section at (916) 322-3499 or via email at Johanna.Levine@arb.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Elizabeth Scheehle".

Elizabeth Scheehle, Chief
Oil and Gas and Greenhouse Gas Mitigation Branch
Industrial Strategies Division

Enclosure

cc: Johanna Levine
Staff Air Pollution Specialist
Emerging Technology Section

Public Workshop to Launch the Development of Air Resources Board's (ARB) Carbon Capture and Sequestration (CCS) Program

Friday, February 12, 2016
9:00 a.m. to 1:00 p.m.
Cal/EPA Headquarters Building
Sierra Hearing Room, Second Floor
1001 I Street
Sacramento, California 95814

Draft Agenda

- Introduction
- ARB Staff Presentation- *Background and Overview*
- California Energy Commission Staff Presentation- *Overview of California specific work on CCS to date*
- Discussion and Comments
- ARB Staff Presentation- *CCS in CA regulations and introduction to ARB quantification methodology development.*
- U.S. Department of Energy (DOE) Staff Presentation- *Overview of DOE's CCS programs and lessons learned during the Regional Carbon Sequestration Partnerships best practice manuals.*
- ARB Next Steps
- Discussion and Comments

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