



# Air Resources Board



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

**Mary D. Nichols, Chairman**  
1001 I Street • P.O. Box 2815  
Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)

**Edmund G. Brown Jr.**  
Governor

August 15, 2014

Mail-Out #MSC14-11

TO: All Interested Parties

SUBJECT: NOTICE OF PUBLIC WORKSHOPS ON TECHNOLOGY ASSESSMENTS FOR TRUCKS AND BUSES, TRANSPORT REFRIGERATION UNITS, RAIL, FUELS, OCEAN GOING VESSELS, COMMERCIAL HARBOR CRAFT, CARGO HANDLING EQUIPMENT, AND AVIATION

The staff of the California Air Resources Board (ARB or Board) invites you to participate in a series of public workshops to discuss technology assessments for trucks and buses, transport refrigeration units (TRUs), rail, fuels, ocean going vessels (OGV), commercial harbor craft (CHC), cargo handling equipment (CHE), and aviation. These technology assessments will help inform development ARB's Sustainable Freight Strategy and future State Implementation Plans for ozone.

The workshops will be held on three days and will each cover different technology or fuels sectors as follows:

<b>Sacramento</b>
Date: Tuesday, September 2, 2014
Time: 9:30 a.m. – 5:00 p.m.
Location: California Environmental Protection Agency 1001 I Street 2 <sup>nd</sup> Floor - Sierra Hearing Room Sacramento, California 95812
Webcast at: <a href="http://www.calepa.ca.gov/broadcast">http://www.calepa.ca.gov/broadcast</a>
Sectors: <b>Trucks and Buses</b>

<b>Sacramento</b>
Date: Wednesday, September 3, 2014
Time: 9:00 a.m. – 4:00 p.m.
Location: California Environmental Protection Agency 1001 I Street 2 <sup>nd</sup> Floor - Sierra Hearing Room Sacramento, California 95812
Webcast at: <a href="http://www.calepa.ca.gov/broadcast">http://www.calepa.ca.gov/broadcast</a>
Sectors: <b>Transport Refrigeration Units, Rail, Fuels</b>

*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

**Diamond Bar**

Date: Tuesday, September 9, 2014  
Time: 10:00 a.m. – 2:30 p.m.  
Location: South Coast Air Quality Management District  
Auditorium – 21865 Copley Drive  
Diamond Bar, California 91765  
Webcast at: <http://www.aqmd.gov/home/library/webcasts>  
Sectors: **Ocean Going Vessels, Commercial Harbor  
Craft, Cargo Handling Equipment, Aviation**

Note that the Commercial Harbor Craft technology assessment is being lead by South Coast Air Quality Management District staff, in coordination with ARB staff, and they are hosting the workshop on September 9, 2014.

For those unable to attend in person, a live internet broadcast (webcasting) will be available. The broadcast can be accessed on the day of the workshops at the links listed above. An email address will also be available to submit questions or comments.

**Background**

ARB's 2012 Vision modeling showed that California will require a transformation to advanced technologies to achieve the significant emission reductions in oxides of nitrogen (NOx) and greenhouse gases (GHGs) needed to meet 2023 and 2032 ozone air quality standards and 2050 climate goals. To achieve those goals, California must develop and implement strategies to deploy advanced mobile source technologies and cleaner, renewable fuels. These technology assessments are the first step in that process. The technology assessments strive to answer the questions – how mature is the technology or fuel, in which applications does it work, and what might be done to further development and deployment?

The technology assessments will evaluate the current state and projected development over the next 5 to 10 years of mobile source technologies and fuels. For each technology, the assessment will include:

- a description of the technology;
- its suitability in different applications;
- the current state of technology development;
- current per-vehicle/equipment costs,
- anticipated costs at widespread deployment;
- emissions levels.



The results of the technology assessments will help identify the technology and fuels that could be included in ARB's Sustainable Freight Strategy, which is intended to move California towards a sustainable freight transport system that is characterized by zero or near zero emissions. The Sustainable Freight Strategy document, which ARB will develop by the end of 2014, will also recognize other freight system priorities including:

- keeping California's ports and logistics industry competitive;
- creating jobs in California and training local workers; system reliability, velocity and capacity;
- integration with the national and international freight transportation system;
- transition to cleaner, renewable transportation energy sources, and;
- a system that supports healthy, livable communities.

The Sustainable Freight Strategy will include recommendations for near-term actions that come out of stakeholder input and technology assessments for truck, rail, ship, commercial harbor craft, air cargo, and cargo handling equipment. Separate workshops focusing on the Sustainable Freight Strategy are scheduled later in September. Information on the development of the Sustainable Freight Strategy can be found at: <http://www.arb.ca.gov/gmp/sfti/sfti.htm>.

The results of the technology assessments will also help inform the development of future State Implementation Plans for ozone, which will set the emission reduction targets needed to meet the standard as part of the attainment demonstration. Determining the strategies and technology transformation needed to meet these targets will involve a comprehensive assessment across all source sectors, with strategies that encompass advanced technologies, fuels, energy efficiency, regional planning, and infrastructure. The technology assessments, which evaluate the status of mobile source technologies and fuels, will be a key element supporting the development of strategies in the State Implementation Plan .

#### Additional Information

Presentations, agendas, as well as any additional material, will be available prior to each workshop at: <http://www.arb.ca.gov/msprog/tech/tech.htm>. The hard copy materials will also be available at each location on the day of the meeting. If you have a disability-related accommodation need, please go to: <http://www.arb.ca.gov/html/ada/ada.htm> for assistance, or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, please contact the Bilingual Coordinator at (916) 324-5049.

All Interested Parties  
August 15, 2014  
Page 4

We welcome your participation in this effort. If you have questions regarding the workshop, please call Ms. Renee Littaua, Staff Air Pollution Specialist, at (916) 324-6429 or email at [rlittaua@arb.ca.gov](mailto:rlittaua@arb.ca.gov).

Sincerely,



Erik White, Chief  
Mobile Source Control Division

cc: Ms. Renee Littaua, Staff Air Pollution Specialist  
Mobile Source Control Division

Ms. Cynthia Marvin, Chief  
Transportation and Toxics Division

Mr. Kurt Karperos, Chief  
Air Quality Planning and Science Division