



April 10 – 11, 2013, 8:30 a.m. to 4:30 p.m.

South Coast AQMD Headquarters Auditorium
21865 Copley Drive, Diamond Bar, CA 91765

Criteria pollutant and greenhouse gas emissions from freight transport related mobile sources are significant contributors to California's air quality and climate change challenges. Meeting federal ambient air quality standards and California's climate change goals will require technology transformation on all levels. As such, innovative freight technologies development, demonstration and deployment must be accelerated over the next several years.

This two-day symposium will include freight technology industry experts to stimulate an open and frank discussion of opportunities, challenges, and implementation timelines for promising zero- and near-zero emission technologies in the following vehicle and equipment categories: on-road trucks and yard hostlers, line-haul freight locomotives, cargo and other on-port vehicles and equipment, and marine vessels.

The *Transitioning to Zero-Emission Freight Transport Technologies Symposium* will be open to the public. An agenda for the symposium will be available shortly and posted at the following websites: www.aqmd.gov, www.valleyair.org, www.arb.ca.gov, and www.epa.gov.

Attendance is Free. Pre-registration is recommended.

To register, email events@aqmd.gov or call Ana Ponce at (909) 396-3008.

For more information, contact Randall Pasek at (909) 396-2251 or email rpasek@aqmd.gov.



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

California Environmental Protection Agency
Air Resources Board



Day 1 - April 10, 2013

8:30 a.m. **Opening Remarks**

Matt Miyasato, Ph.D.
Deputy Executive Officer
Science and Technology Advancement
South Coast Air Quality Management District

Richard Corey
Executive Officer
California Air Resources Board

Rick McVaigh
Deputy Air Pollution Control Officer
San Joaquin Valley Air Pollution Control District

Deborah Jordan
Director - Air Division
U.S. Environmental Protection Agency, Region 9

9:30 a.m. **U.S. EPA Mobile Source Programs**

Donald Kopinski
Senior Project Manager,
Assessment and Standards Division,
Office of Transportation and Air Quality,
U.S. Environmental Protection Agency

9:50 a.m. Break (15 minutes)

10:05 a.m. **Draft Vehicle Technologies Research and Market Transformation Roadmap**

Jim McKinney
Alternative and Renewable Fuels and
Vehicle Technology Program Manager,
Fuels and Transportation Division
California Energy Commission

On-Road Truck/Yard Hostlers Technologies (I)

10:20 a.m. **Moderator:**

Samir Sheikh
Director of Strategies and Incentives
San Joaquin Valley APCD

Battery Electric

Balwinder Samra
President and Chief Executive Officer,
Balqon

James Burns, Ph.D.
Vice President and Chief Science Officer,
Transpower

Gordon Abas Goodarzi, Ph.D.
Chief Executive and President,
US Hybrids

On-Road Truck/Yard Hostlers Technologies (I) (Continued)

Fuel Cell/Hybrid

Jerome Torresyap
President,
Vision Industries Corporation

Natural Gas/Hybrid

Steve Gillette
Director, Application Engineering
Capstone Turbine Corporation

Frank Trotter
Chairman, President and Chief Executive Officer,
ICR Turbine Engine Corporation

Noon Lunch Break (60 minutes)

On-Road Truck/Yard Hostlers Technologies (II)

1:15 p.m. **Moderator:**

Matt Miyasato, Ph.D.
Deputy Executive Officer,
Science and Technology Advancement
South Coast Air Quality Management District

*Extended Range
Catenary/Wayside*

Martin Birkner
Program Manager eHighway,
Siemens

Jan Hellaker
Vice President, Transport Solutions and Services,
Volvo Groups Truck Technology

*Alternative Fuels: Going
beyond 2010 standards*

Moustafa Kamel, Ph.D.
Director, CWI Advanced Engine Systems
Cummins Westport Inc.

Kevin Oversby
Certification Engineer,
Westport Innovations

3:00 p.m. Break (15 minutes)

Roundtable Discussion on Day's Events

3:15 p.m. **Moderator**

- *Promising technologies*
- *Incentive fund needs and priorities*
- *Opportunities for collaboration*

Erik White

Assistant Division Chief,
Mobile Source Control Division
California Air Resources Board

Patrick Davis

Program Manager – Vehicle Technologies Office,
Energy Efficiency and Renewable Energy,
U.S. Department of Energy

Pete Devlin

Manager – Market Transformation and Interagency
Coordination, Fuel Cell Technologies Office
Energy Efficiency and Renewable Energy,
U.S. Department of Energy

Deborah Jordan, U.S. EPA, Region 9

Donald Kopinski, U.S. EPA

Jim McKinney, California Energy Commission

Matt Miyasato, South Coast AQMD

Samir Sheikh, San Joaquin Valley APCD

4:30 p.m. **Adjourn**

Day 2 - April 11, 2013

8:30 a.m. **Welcome and Recap** **Barry Wallerstein, D.Env.**
Executive Officer,
South Coast Air Quality Management District

**Potential Applications of Existing Near-Zero and
Zero-Emission Technologies to U.S. Freight Line-Haul Locomotives**

8:40 a.m. **Moderator** **Jack Kitowski**
Assistant Division Chief, Stationary Source Division,
California Air Resources Board

LNG-fueled Locomotive **Marti Lenz**
Director of Engine Development,
Electro-Motive Diesel, Inc.

*Battery-hybrid and
Tender Car Powered
Locomotive* **Ed Hall, Ph.D.**
Senior General Manager,
General Electric Transportation,

*Dual-mode and All-Electric
U.S. Freight Line-Haul
Locomotives* **Dr. Janis Vitins**
Director of Locomotive Marketing/Product Planning,
Bombardier

10:30 a.m. Break (15 minutes)

Concepts for Advanced U.S. Freight Line-Haul Locomotive Technologies

10:45 a.m. **Moderator** **Henry Hogo**
Assistant Deputy Executive Officer,
Mobile Source Division,
Science and Technology Advancement
South Coast Air Quality Management District

*Zero-Emission Movement
of Freight Containers* **Jo Klinski**
Chief Operating Officer,
Magna Force, Inc.

*Lithium-Ion Battery
Tender Car* **Michael Simon**
President and Chief Executive Officer,
Transpower

*Solid Oxide Fuel Cell
Locomotive* **Dr. Scott Samuelsen**
Professor, Mechanical and Aerospace Engineering
Director, National Fuel Cell Research Center,
University of California Irvine

11:45 a.m. Lunch Break (60 minutes)

Marine Vessels, Cargo Equipment and Other On-Port Vehicles and Equipment

12:45 p.m. **Moderator**

Peter Greenwald

Senior Policy Advisor,
South Coast Air Quality Management District

*Technology needs and
existing demonstration
projects*

Heather Tomley

Assistant Director, Environmental Planning,
Port of Long Beach

Kevin Maggay

Air Quality Supervisor,
Environmental Management Division,
Port of Los Angeles

Renee Moilanen

Environmental Specialist Associate,
Environmental Planning,
Port of Long Beach

Teresa Pisano

Environmental Mitigation Coordinator,
Environmental Management Division,
Port of Los Angeles

Roundtable Discussion on Both Days and Next Steps

2:00 p.m. **Moderator**

Annette Hebert

Division Chief, Mobile Source Control Division,
California Air Resources Board

- *Promising technologies*
- *Incentive fund needs
and priorities*
- *Opportunities for
collaboration*
- *Tie-in to Sustainable
Freight Strategy*

Elizabeth Adams

Deputy Director – Air Division,
U.S. Environmental Protection Agency, Region 9

Henry Hogo, South Coast AQMD

Donald Kopinski, U.S. EPA

Kevin Maggay, Port of Los Angeles

Cynthia Marvin

Division Chief, Stationary Source Division
California Air Resource Board

Jim McKinney, California Energy Commission

Samir Sheikh, San Joaquin Valley APCD

Heather Tomley, Port of Long Beach

3:30 p.m. **Adjourn**