



Meeting Minutes
Trucking Sector Workgroup
Tuesday, August 28, 10am-11am PDT

Port of Long Beach Truck Retrofit Project

Patrick Couch from TIAX Technology Processing gave a brief overview of the ongoing pilot retrofit program at the Port of Long Beach.

Highlights from the presentation:

- Retrofit technology is a key strategy for reducing emissions from diesel trucks, especially with regard to the California Air Resources Board’s (ARB) changing fleet rules and new requirements at the San Pedro Bay Ports.
- Retrofits vary by the types of emissions trying to be reduced, such as NOx or PM. In addition, the suitability of a retrofit option varies between trucks by the duty cycles of the trucks, their workload, horse power restrictions, and the maintenance of the trucks.
- Project participants found that a large percentage of the drayage fleet at the Ports of Long Beach and Los Angeles were suitable for some type of Level 3 retrofit. Trucks with the Cleaire retrofit technology installed see ≥85% PM reductions, and ≥25% NOx reductions.
- There were a few requirements for the trucks, including that they serve the Port three to seven times a week, that the truck age be between the years of 1999-2002, and that the trucks be properly maintained.
- The retrofits have been successful thus far. At the time of the presentation, five trucks have been retrofitted, and seven trucks were data logged. The response from the drivers of the program has also been positive.

California Air Resources Board Idling Reduction Measure

David Chen, from ARB, gave a briefing on upcoming requirements of the idle reduction measure for heavy-duty trucks in California. Starting January 1, 2008, operators of both in State, and out of State sleeper berth equipped trucks will have to shut down their engines after five minutes of idling at any location in California.

Highlights from the presentation:

- ARB views idle reduction technology as a major area for improving emission reductions.
- Currently trucks idle for a number of reasons, including operating power take off devices, warming up the engine, air conditioning comfort, and habit.



- Currently, idle requirements for trucks mandate a five minute idling limit at any location (sleeper berth vehicles are currently exempt when beyond 100ft of a residence or school). There is also a five minute limit on the operation of a diesel-fueled auxiliary power system.
- Starting January 1, 2008, sleeper berth vehicles will lose their current exemption and will also be required to shut down their engines after five minutes of idling. In addition, there will be additional requirements for auxiliary power units and fuel-fired heaters operated on trucks with 2007 and newer engines, and an automatic shutdown system requirement for 2008 California certified on-road heavy-duty diesel engines.
- The requirements for trucks with 2007 and newer engines include diesel-fueled auxiliary power systems equipped with verified level 3 PM traps, Ultra Low Emissions Vehicle (ULEV) approved fuel-fired heaters, and clean auxiliary power system (APS) labels on the hood of the truck.
- The requirements for trucks equipped with 2008 California certified engines include all of the 2007 requirements, as well as a required automatic engine shutdown system.

For more information about the ARB Truck Idling reduction measure, visit: <http://www.arb.ca.gov/noidle>, or contact David Chen at dchen@arb.ca.gov.

Truck Stop Electrification Update

Jeff Kim from Shurepower LLC gave a short presentation on current and future efforts to install truck electrification stations along the West Coast.

Highlights from the presentation:

- Shurepower has installed five electrification stations in Oregon and Washington to decrease truck idling emissions. Early results from these stations have shown that they have been getting significant use. In addition, British Columbia in Canada has installed at least one electrification station as well.
- The stations have allowed for 85% reductions in fuel usage. In addition, drivers have been using alternative plug-in devices, including utilizing plug-in AC systems in lieu of truck battery powered AC systems.
- There has been significant interest in installing Shurepower electrification stations in California as well.



Participants

David Chen, ARB

Patrick Couch, TIAX

Paul Loeper, TIAX

Jon Leonard, TIAX

Julie Kercher, TIAX

Cathy Cartanzi, K&R Transportation

Scott Ruland, Cummins

Dipankar Sarkar, South Coast AQMD

Adam Hansen, SAIC

Kevin Downing, Oregon DEQ

Jeff Kim, Shurepower

Sharon Banks, Cascade Sierra Solutions

Tom Gardiner, Cummins Northwest

Jon Gustafson, Cascade Sierra Solutions

Jerrod Mounce, JB Hunt

David Kayes, Freightliner

Freya Arick, Sacramento Metro. AQMD

Tuan Bui, BC Ministry of Transportation

Kristine Rigby, Vancouver Port Authority

Roxanne Johnson, EPA

Lang Marsh



WEST COAST COLLABORATIVE

Public-private partnership to reduce diesel emissions

Terry Levinson, Argonne National Laboratory

Rick Teebay, LA Dept of Public Works

Jeff Kim, Shurepower

Dean Ford, IdleAire

Wayne Cochrane, Engine Control Systems

Dave Chafin, Eleron

Wafaa Aborashed, Healthy Air San Leandro