

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
October 20, 2005

California Air Resources Board
Byron Sher Auditorium, Second Floor
1001 I Street
Sacramento, California

MEMBERS PRESENT: Hons. Barbara Riordan, Interim Chairman
Dorene D'Adamo
Mark DeSaulnier
Henry Gong, Jr., M.D.
Lydia H. Kennard
Barbara Patrick
Ron Roberts

Agenda Item #

05-10-2: Public Hearing to Consider Proposed Amendments to the Exhaust Emission Standards for 2007-2009 Model Year Heavy-Duty Urban Bus Engines and the Fleet Rule for Transit Agencies

SUMMARY OF AGENDA ITEM:

In 2000, the Air Resources Board (ARB or Board) adopted the statewide Fleet Rule for Transit Agencies, which affects emissions from in-use urban buses that are already in service. The Fleet Rule for Transit Agencies required each transit agency in the state to select a non-revocable compliance path – either the “diesel” path or the “alternative-fuel” path – by January 1, 2001. The path selection establishes the fuel type for new urban bus purchases or leases by the transit agency through model year 2015. In addition, urban buses are subject to tighter engine emission standards.

California’s current oxides of nitrogen (NO_x) emission standard for new 2007 and later model year diesel urban bus engines is 0.2 grams per brake horsepower-hour (g/bhp-hr) – a tightening of the 0.5 g/bhp-hr NO_x standard that has applied for the 2004-2006 model years. For heavy-duty diesel truck engines, the California and federal NO_x standard for the 2007-2009 model years is also 0.2 g/bhp-hr NO_x – but one-half of a manufacturer’s engines may

be certified to the less stringent 2.2 g/bhp-hr NOx standard applicable in model year 2006 and it is expected that most manufacturers will use an averaging mechanism to certify all their 2007-2009 heavy-duty diesel truck engines to an average NOx level of 1.2 g/bhp-hr. Heavy-duty diesel urban bus engines marketed outside California are subject to the federal standards applicable to heavy-duty diesel truck engines. Under these circumstances, the engine manufacturers have indicated they do not plan to certify diesel urban bus engines to meet the California NOx standard of 0.2 g/bhp-hr for 2007-2009 model year, so new diesel bus engines, which are not currently available, would continue to be unavailable for three additional years. Staff has been informed that natural gas engine manufacturers plan to offer 0.2 g/bhp-hr NOx engines by 2007.

At this hearing, the Board considered whether to amend the 2007-2009 model-year 0.2 g/bhp-hr NOx standard for diesel urban buses to align it with the California and federal NOx standard for 2007-2009 heavy-duty diesel truck engines described above. Staff presented its assessment of urban bus engine availability for the 2007-2009 model years under the preexisting standard compared to the amendments being considered. At the conclusion of the hearing, the Board voted (subject to a 15-day supplemental comment process) to leave the current 2007 California urban bus engine emission standard in place, but to allow transit agencies to purchase diesel urban bus engines meeting the 2007-2009 model year heavy-duty truck engine standard as long as transit agencies purchasing 2007-2009 model year urban buses or engines certified to a NOx emission level greater than 0.2 g/bhp-hr meet specified mitigation requirements.

The mitigation consists of:

- Any diesel path transit agency with 30 or more urban buses must retrofit an existing urban bus or transit fleet vehicle in its fleet with a Level 3 particulate matter (PM) verified diesel emission control strategy (DECS) that achieves a minimum NOx emission reduction of 40 percent or more, if available, for each new model year 2007-2009 diesel urban bus purchased that does not meet the 0.2 g/bhp-hr urban bus engine NOx standard.
- If a Level 3 PM DECS with a minimum of 40 percent NOx reduction is not available then an existing engine must be retrofitted with a Level 3 PM DECS that achieves a minimum of 25 percent NOx reduction, if available.
- The retrofit requirement applies on a one-to-one basis, for each new model year 2007-2009 diesel urban bus or diesel urban bus engine purchased that does not meet the 0.2 g/bhp-hr NOx

standard, until all diesel urban buses and transit fleet vehicles within the transit agency's fleet are either retrofitted or are unable to be retrofitted, subject to Executive Officer verification that all available retrofitting has been accomplished.

The Board closed the public comment and directed staff to return on October 27, 2005 and report back on the effects of maintaining the current standard for the 2007-2009 model years on transit agencies' ability to obtain Carl Moyer Incentive funding for new urban buses.

ORAL TESTIMONY:

Valerie Turella, Staff for Assemblyman Dario Frommer
Chuck Harvey, San Mateo County Transit District
Gene Walker, Golden Gate Transit
Steve Heminger, Metropolitan Transportation Commission
Marty Mellerer, San Francisco Municipal Transit
Mary King, Alameda-Contra Costa Transit
Carl Sederyk, Monterey-Salinas Transit
Arthur Douwes, Santa Clara VTA
Kenneth Scheidig, Alameda-Contra Costa Transit
Joshua Shaw, California Transit Association
Jeanne Krieg, Tri Delta Transit
Peter Spaulding, California Association for Coordinated Transportation
Rebecca Kaplan, Alameda-Contra Costa Transit District
Todd Campbell, Coalition for Clean Air
Don Anair, Union of Concerned Scientists
Diane Bailey, Natural Resources Defense Fund
Bonnie Holmes-Gen, American Lung Association
Bruce A. Magnani, California Chamber of Commerce
Jean Roggenkamp, Bay Area Air Quality Management District
Joshua Goldman, ISE Corporation
Dawn Friest, Engine Manufacturers Association
Joe Sparano, Western States Petroleum Association
Mitchell Pratt, Clean Energy
Michael Eaves, California Natural Gas Vehicle Coalition
Brian T. Stokes, Pacific Gas & Electric

FORMAL BOARD ACTION: The Board voted to approve Resolution 05-53.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes.

05-10-3: Public Hearing to Consider Requirements to Reduce Idling Emissions from New and In-Use Trucks, Beginning in 2008

SUMMARY OF AGENDA ITEM:

In accordance with the Board's directive from the July 2004 Board meeting, staff returned to the Board to present proposed requirements to reduce idling emissions from new and in-use sleeper berth equipped trucks. The proposal consisted of new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to the truck's main engine idling.

The new engine requirements require 2008 and newer model year heavy duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or optionally meet a 30 gram per hour oxides of nitrogen (NOx) idling emission standard. The in-use truck requirements require operators of sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California beginning in 2008.

To provide cabin conditioning and electrical power, truck operators may choose to add technologies such as auxiliary power systems (APS) and fuel-fired heaters. The proposal establishes special emission performance requirements to ensure emissions from these technologies do not exceed emissions from an idling truck engine. Specifically, the regulation requires diesel APSs installed on 2007 and newer truck engines to control particulate matter (PM) emissions by either routing the APS exhaust through the PM trap of the truck engine or by retrofitting the diesel APS with a verified level 3 PM control device that reduces PM emissions by at least 85 percent. Fuel fired heaters installed on 2007 and newer truck engines are also required to meet the Ultra Low Emission Vehicle requirements specified in the Low Emission Vehicle regulations. These requirements are effective beginning in 2008.

The staff presented suggested modifications to the originally proposed regulatory text, including:

- Modify language in the new engine requirements related to one of the power take-off override provisions to address safety concerns.

- Modify the amendments to the in-use idling airborne toxic control measure (ATCM) requirements to allow battery electrics, electric infrastructure, or technologies related to usage of electric shore power to offer these technologies as alternatives without prior Executive Officer approval, and
- Modify the in-use idling ATCM language to clarify the availability of electric shore power as a compliance option.

ORAL TESTIMONY:

Dawn Friest, Engine Manufacturers Association
Will Schaefer, Truck Manufacturers Association
Mike Tunnel, American Trucking Association
Staci Heaton, California Trucking Association
Randal Friedman, United States Department of Defense
Jason Vega, California Council for Environmental and Economic Balance
Rolf Lichtner, Webasto Product North America
David Everhart, IdleAire
John Fehrenbach, Winston & Strawn, LLP
David Modisette, California Electric Transportation Coalition
Warner Harris, Coval H2 Partners, LLC
Rex Greer, Pony Pack, Inc.
Peter Rooney, Pony Pack, Inc.
Andrea Samulon, Pacific Institute
Diane Bailey, Natural Resources Defense Council
Karen Pierce, Ditching Dirty Diesel Collaborative
Bonnie Holmes-Gen, American Lung Association
Don Anair, Union of Concerned Scientists
Wayne Iorentzen, California National Guard
Bill Magavern, Sierra Club of California
Todd Campbell, Coalition for Clean Air, City of Burbank

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 05-55 approving the proposed idling emission reduction requirements from new and in-use trucks, with staff's proposed modifications. The modifications will be made available for a 15-day supplemental comment period prior to final action by the Executive Officer.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

05-10-4:

Public Hearing to Consider the Approval of a Proposed Suggested Control Measure (SCM) for Automotive Coatings

SUMMARY OF AGENDA ITEM:

Staff presented a proposed Suggested Control Measure (SCM) for Automotive Coatings. The proposed SCM specifies volatile organic compound (VOC) limits for 12 automotive coatings categories and for cleaning solvents. The proposed SCM also exempts tertiary butyl acetate (TBAC) from the VOC definition. The proposed SCM applies to manufacturers, distributors, sellers and users of automotive coatings and cleaning solvents associated with automotive coatings.

The proposed SCM will reduce VOC emissions by about 15 tons per day. The reduction in emissions will result in decreased ozone and particulate matter, reducing public exposure and the associated health risks. The proposed SCM is designed to be used by the districts as a model rule when they adopt or amend automotive coatings rules.

Industry representatives supported the element of SCM lowering the VOC limits for color coatings and clear coatings effective January 1, 2009, but requested an additional year to comply with the VOC limits for smaller coating categories. A representative from the Sacramento Metropolitan Air Quality Management District testified in support of the proposed SCM. A representative of Lyondell Chemical, a TBAC manufacturer, expressed concern that the VOC exemption for TBAC was not as broad as that for compounds previously exempted by the ARB.

ORAL TESTIMONY:

Jim Sell, National Paint and Coatings Association

George Patterson, DuPont

Mike Veney, Sherwin-Williams

Mike Koss, PPG

Richard Lawrie, Akzo Nobel

Richard Evans, Inter-Industry Conference on Auto Collision Repair

David Grose, Sacramento Metropolitan Air Quality Management District

Dr. Daniel Poureau, Lyondell Chemical

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 05-46 approving the proposed SCM with modifications. The modifications include extending the effective date to January 1, 2010 for the primer sealer and the single-stage coating categories.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes