

State of California  
AIR RESOURCES BOARD

Summary of Board Meeting  
April 24, 2003

Air Resources Board  
Central Valley Auditorium, Second Floor  
1001 I Street  
Sacramento, CA 95814

MEMBERS PRESENT: Hons. Alan C. Lloyd, Ph.D., Chairman  
Dr. William A. Burke  
Joseph C. Calhoun, P.E.  
Doreen D'Adamo  
Mark DeSaulnier  
C. Hugh Friedman  
William F. Friedman, M.D.  
Matthew R. McKinnon  
Barbara Patrick  
Barbara Riordan  
Ron Roberts

AGENDA ITEM #

**03-2-2 Public Meeting to Consider Appointments to the Research  
Screening Committee - Continued from the March 27-28, 2003  
Board Meeting**

SUMMARY OF AGENDA ITEM:

Staff recommended appointments to the Board's Research Screening Committee. This Committee reviews and recommends air pollution research projects to the Board. The appointments will fill current vacancies on the Committee.

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

Approved the staff recommendations for appointments to the Research Screening Committee by a unanimous vote.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None

**Public Meeting to Consider Proposition 40 and Amendments to the Carl Moyer Program -- Continued from the March 27-28, 2003 Board Meeting**

SUMMARY OF AGENDA ITEM:

On March 27, 2003, the Air Resources Board (ARB or Board) conducted a public meeting to consider revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) Guidelines to the Lower-Emission School Bus Program Guidelines. The Board approved the revisions to the Lower-Emission School Bus Program Guidelines. However, based on testimony provided at the hearing, the Board continued the item on the Carl Moyer Program to consider staff's evaluation of the funding allocation methodology for local air districts. On April 24, 2003, the Board approved staff's recommendation to keep the current funding allocation methodology. However, the Board directed staff to continue discussions with the local air districts through the California Air Pollution Control Officers Association to determine an alternative methodology for allocating funds.

The approved guidelines contain new matching fund requirements, including the opportunity for smaller districts to obtain a one-year waiver for their match, and a new provision that allows particulate matter reduction projects paid for with district funds to qualify as matching funds. Other modifications include new environmental justice requirements, updated cost-effectiveness criteria, updated criteria to include new engine emission standards and inventories, and several minor technical and administrative modifications. By approving these revisions, the Board ensures that the Carl Moyer Program continues to deliver real, quantifiable, enforceable, and cost-effective emission reductions.

ORAL TESTIMONY:

Michael Conlon - Automotive Engine Rebuilders  
Steve Hoke - Automotive Engine Rebuilders  
Bill Mirth - Federal-Mogul  
Jay Wagner - Dana Corp.  
Steve Hurd - Caterpillar  
Clayton Miller -Construction Industry Air Quality Coalition  
Rick McCourt - Company Construction  
Gretchen Knudsen - International Truck and Engine Corp.  
Sandra Spelliscy - PCL  
Mark Nordheim - WSPA  
Bonnie Holmes-Gen - American Lung  
Dean Taylor - SoCal Edison  
Tom Addision - Bay Area Air Quality Management District  
Henry Hogo - SCAQMD

FORMAL BOARD ACTION: Approved

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

**03-2-4 Public Hearing to Consider Amendments to the California Zero-Emission Vehicle (ZEV) Regulation**

SUMMARY OF AGENDA ITEM:

The Air Resources Board (Board) continued discussion of proposed amendments to the California ZEV regulations as presented at the Board's March 27-28, 2003, hearing. The proposed changes were prepared in response to legal action taken by General Motors, DaimlerChrysler, and several Fresno-area dealerships asserting that provisions of the 2001 ZEV amendments pertained to fuel economy and were thus preempted by federal legislation.

To address the legal issues, the proposed amendments eliminated all references to fuel economy and efficiency. The Board also considered additional amendments that were proposed in response to the state of battery and advanced technologies.

At the March hearing, staff had provided an overview of the rationale for the proposed changes and described the key elements of the staff proposal which were designed to:

- maintain a core technology-forcing requirement,
- eliminate all references to efficiency and fuel economy,
- create an alternative compliance path for greater flexibility,
- establish an independent review panel to advise the Board on technology status in the future for determination of future ZEV requirements, and
- address a number of smaller implementation issues.

At the April hearing, staff provided a summary of the March discussion and also provided additional analysis of several key issues that were unresolved from the March hearing. Staff then described the overall effect of the staff proposal.

Impacts of the amendments are as follows:

The number of pure ZEVs required would be reduced, particularly in the early years. However, the number of Advanced Technology Partial ZEVs would be greatly increased assuming that

manufacturers choose to take advantage of an alternate compliance path.

The proposed amendments are projected to reduce the overall cost to industry by about \$375 million to more than \$3.6 billion during the 2005 to 2011 timeframe. This range reflects uncertainties regarding each manufacturer's compliance strategy, but the savings would primarily be the result of the reduced number of pure ZEVs required.

The proposed amendments would provide slight air quality benefits when compared to the 2001 program. When compared to having no ZEV program, the amended program is expected to reduce approximately 1.4 and 5.5 tons per day of combined direct emissions of reactive organic gases and oxides of nitrogen in the South Coast Air Basin by 2010 and 2020, respectively.

The Board made several adjustments to staff's original proposal that included percentage requirements for 2009 and beyond, incentives for existing and new battery electric vehicles, and annual reporting requirements.

#### ORAL TESTIMONY:

S. David Freeman-California Power Authority  
Menahem Anderman-Total Battery Consulting  
Henry Perea-Fresno Councilman  
Dr. Andrew Frank-UC Davis  
Dr. Lou Browning-ICF Consulting  
Dr. Amanda Miller-EPRI  
Joe Tomita-Toyota Motor Company  
Mary Nickerson-Toyota Motor Company  
David Hermance-Toyota Motor Company  
Ben Knight-American Honda  
Kelly Brown-Ford Motor Company  
Reagan Wilson-Stanislaus County  
Scott Briasco-Los Angeles Department of Water and Power  
Bill Warf-Sacramento Municipal Utility District  
John Boesel-Calstart/Weststart  
Ed Kjaer-Southern California Edison  
Dave Modisette-California Electric Transportation Coalition  
Bonnie Holmes-Gen-American Lung Association  
Jason Mark-Union of Concerned Scientists  
Roland Hwang-Natural Resources Defense Council  
Tom Gage-AC Propulsion  
Dana Muscato-Phoenix Motorcars  
Daniel Rivers-Compact Power  
Dan Sturges-Mobility Lab  
Tom Fulks-Green Car Institute

Michael Coates-Green Car Group  
Diego Miralles-EV Works  
Robert Kittell -Electricab Energy Corporation  
Tom Addison -Bay Area Air Quality Management District  
Henry Hogo -South Coast Air Quality Management District  
Carl Johnson-New York State Department of Environmental  
Conservation  
Paul Scott-Production EV Drivers Coalition  
Zan Dubin-Scott-Citizen  
Mike Kane-Citizen  
Christine Kirby -Massachusetts Department of Environmental  
Protection  
Armando Flores-Stanislaus County Hispanic Chamber of  
Commerce, Latino Political Action Committee  
Tim Hastrup-Citizen  
Robert Gibney-Avestor  
Daniel McCarthy-Evercel Incorporated  
Serge Roy-Capitech  
Mike Thompson-Citizen  
Marylin Bardet-Citizen  
Bev Sanders-Citizen  
Clare Bell-E-Vet  
Elaine Lissner-Citizen  
Kimberly Rogers-Citizen  
Patricia Lankinsmith-Monterey Technologies  
Ed Thorpe-Production EV Drivers Coalition  
Steve Heckeroth-Citizen  
Thomas Bradley-Citizen  
Steve Casner-Citizen  
Douglas Kerr-Citizen  
Nicholas Carter-Citizen  
Marc Geller-Citizen  
Steven Dibner-Citizen  
Bill Smith-Virtual Agile Manufacturing

FORMAL BOARD ACTION:

The Board approved Resolution No. 03-4 by an 8 to 3 vote.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

**03-3-1: Health Update**

**SUMMARY OF AGENDA ITEM:**

Staff updated the Board on the results of a recently published study on ozone health effects in asthmatics. The health effects of air pollution on people with asthma have been a concern of the Board for some time due to the sensitivity of this vulnerable population. Results of many epidemiological studies have demonstrated statistical associations between ambient ozone exposures and asthma exacerbation, as well as emergency room visits and hospital admissions for asthma. However, controlled exposure studies suggest that when asthmatics are exposed only to ozone they respond similarly to nonasthmatics. The paper investigated a possible explanation for these disparate findings by studying the responses of mild asthmatics who underwent controlled exposures to filtered air or ozone on the day after an asthma exacerbation was induced by allergen inhalation. The results indicated that a two-hour exposure to ozone resulted in reduced lung function, and increased respiratory symptoms, such as cough, chest tightness and pain on deep breath, compared to effects following exposure to filtered air.

In addition, ozone inhalation increased the allergic inflammation that had been induced by the allergen exposure on the previous day. The results indicate that ozone exposure can intensify allergic inflammatory responses induced by previous allergen exposure in subjects with mild allergic asthma. Further, the results provide a biological explanation for the increased asthma exacerbation and emergency room visits and hospital admissions for asthma observed in epidemiological studies. Finally, this report illustrates that exposure studies that do not include an allergen challenge may underestimate the impact of ozone on the health of asthmatics. The study has implications for standards setting because of its evidence for health impacts of ozone exposure in asthmatics.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None

03-3-2

**Informational Item to Discuss Reducing Emissions From In-Use Gasoline Vehicles**

SUMMARY OF AGENDA ITEM:

Staff presented an overview of excess emissions from the light-duty fleet. Excess emissions are defined as those emissions that exceed the standards to which the vehicles have been certified. Staff also discussed three potential programs that could reduce these excess emissions: improved Smog Check, a voluntary accelerated vehicle retirement program, and an emission control system replacement program for pre-1994 vehicles.

ORAL TESTIMONY:

Charlie Peters – Clean Air Performance Professionals  
Chris Ervine – Coalition of State Test and Repair Stations

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: None

03-3-3:

**Notice of Public Meeting to Consider the Approval of A Report and Findings on the Exemption of Additional Vehicles from California's Smog Check Program**

SUMMARY OF AGENDA ITEM:

In 2002 the Legislature enacted AB 2637 (Stats. 2002, Chapter 1001), which required the establishment of an enhanced Smog Check Program in the urbanized areas of the San Francisco Bay Area Air Basin. Among other requirements, AB 2637 also provided for new motor vehicles to be exempted statewide from the Smog Check biennial inspection program for up to six model years instead of the current four model years. The increased exemption was to become effective in all basic and enhanced Smog Check areas beginning January 1, 2004, unless the ARB found that exempting the additional vehicles would prohibit the State from meeting the requirements of section 176(c) of the federal Clean Air Act or California's commitments with respect to the State Implementation Plan (SIP).

The staff reviewed the requirements of AB 2637 and investigated the emissions impact of increasing the Smog Check exemption to either five or six model years for new motor vehicles. The analyses showed that significant, adverse emissions impacts would result

from increasing the exemption to either five or six model years. Therefore, the staff proposed that the Board approve its report and find that a fleet-wide exemption for new motor vehicles from Smog Check beyond the current four years would result in adverse emission impacts that would prohibit the State from meeting the requirements of section 176(c) of the federal Clean Air Act and California's commitments with respect to the State Implementation Plan. As indicated in the report, ARB staff also suggested that further investigation is warranted to determine if subgroups of cleaner five and six year old vehicles can receive an extended exemption period from their initial Smog Check inspection with minimal adverse emission impacts.

ORAL TESTIMONY:

Charlie Peters	Clean Air Performance Professionals
Larry Armstrong	Quality Tune-Up Shops
Chris Ervine	Coalition for Test and Repair Stations

FORMAL BOARD ACTION:

The Board approved, by a unanimous vote, Resolution 03-06 which accepts the findings that additional Smog Check exemptions would not be given to new vehicles at age five and six in Enhanced Smog Check Areas.

In addition, the Board also asked staff to investigate further the potential from Smog Check exemptions of new vehicles at age five and six in Basic Smog Check Areas, especially those areas that have been designated as federal non-attainment areas, where a SIP requirement would be in jeopardy.

RESPONSIBLE DIVISION: Mobile Source Operations Division

STAFF REPORT: Yes

**03-3-4**

**Public Meeting to Consider Federal Sources of Air Pollution in California**

SUMMARY OF AGENDA ITEM:

The ARB staff gave a presentation on emission source categories for which the federal government is responsible. These are categories that the state cannot regulate and include aircraft, locomotives, ocean-going vessels, small farm and construction equipment, and out-of-state diesel trucks. Cooperation from the federal government is essential in order to obtain emission reductions from these federal sources.



The ARB has enjoyed a successful partnership with the U.S. Environmental Protection Agency (U.S. EPA). Heavy-duty diesel trucks, offroad engines, and locomotives have seen significant reductions due to joint ARB and U.S. EPA regulatory efforts. Reductions from ships and aircraft have presented a greater challenge due to the international nature of these sources. Because recent studies and modeling have confirmed that California still needs large reductions in emissions to achieve federal ozone standards, it is imperative this mutually beneficial relationship continue for California to attain clean air.

Staff also discussed opportunities for emission reductions from federal sources through the possible implementation of more stringent new engine standards, retrofit of existing sources with emission reducing technologies, and the introduction of cleaner fuels.

ORAL TESTIMONY:

Kathy Patton, Santa Barbara Air Pollution Control District  
Robert Larson, U.S. EPA

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Planning and Technical Support  
Division

STAFF REPORT: None