

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
January 22 & 23, 2009

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

MEMBERS PRESENT: Mary Nichols, Chairman
Dr. John Balmes
Ms. Sandra Berg
Ms. Dorene D'Adamo
Ms. Lydia Kennard
Mrs. Barbara Riordan
Professor Daniel Sperling
Dr. John Telles
Supervisor Ken Yeager

Agenda Item #

**09-1-7: Report to the Board on the Air Resources Board's Program
Priorities for 2009**

SUMMARY OF AGENDA ITEM:

Executive Officer James Goldstene briefed the Board on major rulemaking and initiatives that staff will present in the coming year. The presentation highlighted the continuing efforts of the Air Resources Board (ARB or Board) in meeting air quality standards, reducing diesel particulates, and implementing the Assembly Bill 32 Climate Change Scoping Plan.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Planning & Technical Support Division

STAFF REPORT: No

09-1-1: Health Update: Potential Health Impacts of Residential Wood Burning

SUMMARY OF AGENDA ITEM:

ARB staff provides the Board with regular updates on recent research findings on the health effects of air pollution. This month, staff presented the findings of recently published research on the potential health impacts of exposure to wood smoke in children and adults.

The health impacts of exposure to fine particulate matter (PM2.5), such as an increased risk for mortality and asthma exacerbation, are well established from large epidemiology studies. Yet the sources of PM2.5 responsible for these health effects are largely unknown. This month's health update focused on one source of PM2.5, wood smoke, and its respiratory effects on asthmatic and healthy children and adults. The studies presented in this health update found associations between wood smoke exposure and lung function and inflammation in asthmatic children. Increases in inflammatory markers with wood smoke exposure were also found in healthy and asthmatic adults. In addition, increased hospital admissions were found in children and adults exposed to ambient wood smoke. Staff also discussed current ARB research projects investigating the contribution of wood smoke to air pollution-related health effects. These studies and the dominance of wood smoke in wintertime PM2.5 in many areas of California underscore the need to reduce this source of PM2.5.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

09-1-2: Public Hearing to Consider the Adoption of a Proposed Regulation for Small Containers of Automotive Refrigerant

SUMMARY OF AGENDA ITEM:

The Board approved a measure to reduce greenhouse gas emissions from small containers of automotive refrigerant. This measure was identified as a discrete early action greenhouse gas reduction measure under the California Global Warming Solutions Act of 2006 (AB 32). This measure will reduce emissions of

greenhouse gases by 260,000 metric tons of carbon dioxide equivalent per year. Automotive air conditioning systems are a significant source of global warming emissions because the current refrigerant, HFC-134a, is a highly potent greenhouse gas. The global warming potential of a 12 ounce can of refrigerant is equivalent to the carbon dioxide emissions from a passenger car being driven 1,000 miles or from burning a barrel of oil.

The regulation includes requirements for a self-sealing valve on all small containers of automotive refrigerant as well as improved container labeling. It also requires manufacturers to develop an education program so do-it-yourself users are informed of best practices for using the product, and establishes a deposit and recycling program for used containers. These regulatory components will work in conjunction to reduce refrigerant emissions during servicing and to retain unused refrigerant in containers until it can be reclaimed and reused.

The regulation applies to containers holding more than 2 ounces and less than 2 pounds of refrigerant by weight, and exempts automotive refrigerant with a global warming potential value of less than or equal to 150.

The regulation would increase the price of a small container of automotive refrigerant by about \$1.00. The current price of a small container is approximately \$10.00. The deposit and recycling program also requires a consumer to pay a \$10.00 deposit when the container is purchased, but this deposit will be fully refunded when the consumer returns the used container to the retailer. Deposits for unreturned cans will be transferred to can manufacturers, who must then spend those funds to enhance educational programs for consumers. Manufacturers must account for the collection and expenditure of these funds.

Manufacturers, distributors, retailers, and recyclers must annually report to ARB data on the number of containers sold and returned for recycling, and must also maintain records that allow ARB enforcement staff to verify compliance with the regulation.

The Board heard oral testimony from six organizations encouraging adoption of the proposed regulation, including Plotkin & Associates on behalf of Automotive Refrigeration Products Institute (ARPI), IDQ (Interdynamics & EF Products), AutoZone, NAPA Auto Parts, Levins, and Automotive Aftermarket Industry Association. There was no testimony in opposition to the proposed regulation.

ORAL TESTIMONY:

Normal Plotkin, Plotkin & Associates on behalf of ARPI
Michael Klein, IDQ (Interdynamics & EF Products)
Diana Hull, AutoZone
Jeff Hove, NAPA Auto Parts
Doug Stanley, Levins
Aaron Lowe, Automotive Aftermarket Industry Association

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 09-1, and expressed a desire for staff to continue to collaborate with industry to add clarity on issues regarding timeframes for reporting, and deposit/return requirements regarding breached containers.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: Yes

09-1-3: Public Hearing to Consider Proposed California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles

SUMMARY OF AGENDA ITEM:

Implementation of more stringent emission standards for highway motorcycles in recent years has resulted in the increased use of catalytic converters in motorcycle exhaust systems. However, owner modification of motorcycles today is also very common, and often results in original, catalyst-equipped exhaust systems being replaced with aftermarket exhausts that may not have replacement catalysts and/or have not been exempted by the Board from California anti-tampering laws. In addition, many of these improper modifications are being made when motorcycles are still covered by the original emission warranty.

Aftermarket catalytic converters are termed “aftermarket critical emission control parts” because they are designed primarily for the control of emissions. Other common examples used on highway motorcycles include oxygen sensors and hydrocarbon absorbers.

ARB does not have suitable evaluation procedures in place for the exemption of such aftermarket critical emission control parts and was thus requested by several aftermarket motorcycle exhaust companies to develop new procedures for highway motorcycles. The proposal is modeled after many of the provisions required to

obtain emission certification of new highway motorcycles. The purpose is to ensure that all aftermarket critical emission control parts remain as durable and reliable as the stock counterparts they replace despite being installed early in a motorcycle's ownership. Accordingly, the proposed evaluation procedures include provisions for durability emission testing, emission defects warranty, installation warranty, warranty reporting, recordkeeping, labeling, audit testing, and in-use recall.

At the Board meeting, the sole issue raised about the evaluation procedures was the stated difficulty in documenting motorcycle vehicle identification numbers (VIN) when an aftermarket critical emission control part is sold by a dealer or retailer. However, VIN reporting is necessary because it remains the most direct and accurate method for locating actual motorcycle owners in the event of an aftermarket critical emission control part recall.

ORAL TESTIMONY:

Joseph Kubsch, Manufacturers of Emission Controls Association
John Paliwoda, California Motorcycle Dealers Association
Tom Austin, Motorcycle Industry Council
Bonnie Holmes-Gen, American Lung Association

FORMAL BOARD ACTION:

The Board unanimously adopted Resolution 09-2 as proposed.

RESPONSIBLE DIVISION: Mobile Source Operations Division

STAFF REPORT: Yes

09-1-6: Public Meeting to Report to the Board on the Impacts of the Particulate Matter Performance Standards of the In-Use On-Road Vehicle Regulation in Oxides of Nitrogen Attainment Areas

SUMMARY OF AGENDA ITEM:

At the Board's December 12, 2008, hearing, the Board approved the proposed regulation to reduce emissions of diesel particulate matter (PM), oxides of nitrogen (NOx), and greenhouse gases from in-use on-road diesel vehicles that operate in California (Truck and Bus Regulation). The regulation contains special provisions for vehicles that operate exclusively within certain designated air quality attainment areas of the State identified in the approved Truck and Bus Regulation. Any vehicle that

operates exclusively in these areas, known as NOx Attainment Area counties, would not be required to be replaced until 2021. However, they would remain subject to the PM requirements which are phased-in from 2011 to 2014.

The Board raised questions about the need for diesel PM emissions reductions in NOx Attainment Area counties on the same schedule as the rest of the State. Board members also questioned whether the PM retrofit requirements for trucks that operate exclusively within these designated areas could be aligned with the vehicle replacement requirements so as to reduce the need for multiple compliance actions on the same vehicle. The Board requested that staff provide an update on the impacts of the PM performance standards for vehicles driven exclusively within the designated NOx attainment areas identified in the approved Truck and Bus Regulation.

Staff's presented the results of a risk analysis showing that localized diesel PM hot spots do occur in NOx attainment counties, and that significant exposure risks occur along roadways where most people live and breathe. Staff concluded that delaying the PM retrofit requirements in these areas would significantly increase localized exposure risk.

Following the staff presentation, the Board heard testimony from four individuals. The executive director of the Associated California Loggers indicated a need for more outreach to help his members who are trying to make decisions to comply with the regulation. The remaining witnesses opposed any delay in the PM retrofit requirements approved in the Truck and Bus regulation.

The Board directed staff to return in December 2009 with an update on the logging industry that includes information on the cost impacts on the industry, and availability of funding for logging trucks. Staff was also asked to report back on options to lower the compliance costs for these trucks while achieving the same benefits.

ORAL TESTIMONY:

Eric Carleson, Associated California Loggers
Bonnie Holmes-Gen, American Lung Association
Diane Bailey, Natural Resources Defense Council
Betsy Reifsnider, Catholic Charities Diocese of Stockton
Don Anair, Union of Concerned Scientists

FORMAL BOARD ACTION: None (Informational item)

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: No

09-1-4: Public Hearing to Consider Proposed Amendments to the Regulation for In-Use Off-Road Diesel Fueled Fleets and an Update on Status of Implementation of the Regulation

SUMMARY OF AGENDA ITEM:

The in-use off-road diesel vehicle regulation (the regulation) was originally approved by the Board on July 26, 2007. When implemented, it will significantly reduce emissions of diesel PM and NOx from the nearly 180,000 in-use off-road diesel vehicles that operate in California by requiring fleet owners to accelerate turnover to cleaner engines and install exhaust retrofits.

To provide additional flexibility and clarity to the regulation, at the January 22, 2009, Board meeting, staff proposed several changes to the regulation, including an amendment to extend the deadline for double PM retrofit credit for fleets that have installed the highest level verified diesel emissions control strategies (VDECS) for PM by 10 months (from March 1, 2009, to January 1, 2010). This change will provide additional time for manufacturers of diesel emission control strategies to verify new off-road retrofit applications, as well as time for additional fleets to purchase and install VDECS that have been recently verified. Staff recommended this extension because exhaust retrofits have been verified at a slower pace than anticipated, leaving many fleets unable to take full advantage of the double PM retrofit credit provision.

In addition to presenting the proposed amendments to the regulation, staff presented a technology update report to the Board and updated the Board on how implementation of the regulation has proceeded in the year and a half since the regulation was approved. Staff also summarized the significant public outreach and reporting work that has been completed since the regulation was approved.

At the Board meeting, 21 witnesses testified—13 in support of the amendments, 3 opposed, and 5 neutral. Health and environmental advocates testified in support of keeping the regulation strong and had no objections to the amendments proposed by staff. The South Coast Air District presented a summary of the money spent on early emissions reductions projects through the Surplus Off-Road Opt-In for NOx (SOON) program. Many industry representatives and fleet owners also testified in support of staff's recommended amendments to the regulation.

A number of industry representatives also testified that additional changes to the regulation should be made for the following reasons:

- The current slowdown in construction activity has reduced emissions enough to warrant a postponement of the regulation.
- The amendments to the regulation did not go far enough to alleviate the financial burdens of the regulation;
- Exhaust retrofit systems are unsafe, not technically feasible to meet the regulation's retrofit requirements, and are more expensive than staff's original estimates;
- Fleets will not be able to pass on the costs of compliance to their consumers in the current economic climate;
- The Board should postpone the regulation until staff has fully considered the petition submitted by the Associated General Contractors of America.

ORAL TESTIMONY:

Dr. Joseph Kubsh, MECA
Henry Hogo, SCAQMD
Michael Lewis, Lewis & Co. (Construction Industry Air Quality Coalition)
Clayton Miller, CIAQC
William E. Davis, Southern California Contractors Association
James Hunt, Syblon Reid
Dave Porcher, Camarillo Engineering
Michele Corash, Associate of General Contractors of America/Morrison Forester
Mary Pitto, Regional Council of Rural Coalition
James Thomas, Nabors Well Service
Tom Swenson, Cleaire
Tim Pohle, Air Transportation Association
Nick Pfeifer, Granite Construction Inc.
Gary Rohman, ECCO Equipment
Brant Ambrose, Downs Equipment

Rodney Michaelson, Bay Cities Paving & Grading
Bonnie Homes-Gen, American Lung Association
Diane Bailey, NRDC
Don Anair, Union of Concerned Scientists
Andrew Bray, Sierra at Tahoe
Mike Steel, Associate of General Contractors of
America/Morrison Forester

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 09-3, and directed staff to report back to the Board in the fall of 2009 with an update on the off-road inventory, and a summary of the effects of the current economic downturn on emissions from off-road vehicles subject to the regulation. The Board also directed staff to work with the Associated General Contractors of America (AGC) to discuss their petition to reconsider and/or repeal or amend the regulation and to collect any data from them which could potentially aid staff in their investigation of the effect of the economic downturn on off-road emissions.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

09-1-5: Public Meeting to Consider Approval of California's Regional Haze Plan

SUMMARY OF AGENDA ITEM:

The Board adopted the California Regional Haze Plan (Plan) as a revision to the California State Implementation Plan for submittal to the U.S. Environmental Protection Agency (U.S. EPA). The Board, as lead agency under the California Environmental Quality Act, also determined that there are no feasible alternatives to the Plan and that the Plan will not result in any significant adverse environmental impacts.

The Plan charts a path towards improving visibility in California's national parks and wilderness areas (Class 1 Areas). In 1999, the U.S. EPA adopted the Regional Haze Rule (Rule) for implementing a national initiative to achieve natural conditions visibility in these special areas throughout the United States. The Rule specifies requirements for regional haze plans, including interim goals and a control strategy for the first milestone year of 2018, on a long-term path towards natural visibility conditions. Visibility, and the haze that impairs it, is a regional issue. Therefore, the Plan was

prepared in consultation with the fifteen western states of the Western Regional Air Partnership. As required by the Rule, staff also consulted with the federal land management agencies, in particular with representatives of the National Park Service and the United States Forest Service who manage the Class 1 Areas in California.

The Plan includes Reasonable Progress Goals for 2018 for each Class 1 Area in California based on California's existing control strategy. While emission sources affecting visibility can be man-made or natural, the Plan's control strategy focuses on sources California can control. Very low concentrations of particulate matter in ambient air can impair visibility. Therefore, California's extensive emissions reduction effort to reduce particulate matter and precursor emissions provide for visibility improvement in all California Class 1 Areas by 2018, and help reduce haze in out-of State Class 1 Areas.

For the first planning cycle, the Rule requires a statewide Best Available Retrofit Technology (BART) analysis of large, older, high-emitting sources to determine whether additional controls are needed that could improve visibility at nearby Class 1 Areas. Only one facility, the Valero refinery in Benicia, met these criteria. For this facility, appropriate controls are already scheduled for implementation by the end of 2013 through other existing mechanisms. After release of the Plan, the Bay Area Air Quality Management District provided a clarification to Table 5.4 in the Plan to better reflect these existing regulatory and permit requirements as well as a consent decree between the facility and U.S. EPA. This clarification has been included in the final Plan

Prior to approval, the Board heard oral testimony from two parties, the United States Forest Service and the California Council for Environmental and Economic Balance, encouraging the Board's approval of the Plan.

ORAL TESTIMONY:

Christine Nota, Regional Forester's Representative, U.S.
Department of Agriculture, Forest Service
Mark Hite, Advocate, California Council for Environmental and
Economic Balance

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 09-4.

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: Yes

09-1-8: Public Hearing to Consider Plug-In Hybrid Electric Vehicle Test Procedure Amendments and Aftermarket Parts Certification Requirements Adoption

SUMMARY OF AGENDA ITEM:

Staff recommended that the Board amend passenger car, light-duty truck, medium duty vehicle, hybrid electric vehicle and zero emission vehicle exhaust, evaporative, and refueling emissions test procedures to more accurately measure emissions from plug in hybrid electric vehicles (PHEV), as well as determine the contribution of electric drive for PHEVs. Staff also recommended that the Board adopt certification requirements for PHEV aftermarket conversion systems, adopt a new procedure for range determination for fuel cell electric vehicles, and make several other staff proposed modifications.

The recent amendments to the Zero Emission Vehicle (ZEV) program included a regulatory compliance option based in part on PHEV production. PHEVs utilize motive power supplied by an internal combustion engine and electricity stored in batteries or other energy storage systems. The stored electricity may provide exclusive vehicle propulsion until additional engine power is needed, as well as be combined with motive power from the engine. Current exhaust and evaporative emission test procedures are not optimized to accurately characterize emissions from PHEVs.

The proposed certification and installation requirements for PHEV conversion systems are based on similar requirements for other aftermarket parts. The proposed requirements ensure that conversion systems adding electric range to existing hybrid electric vehicles do not increase emissions.

The proposed amendments provide methods to determine PHEV exhaust and evaporative emissions as well as calculate all-electric range. The proposed procedure for fuel cell vehicle range determination greatly reduces the laboratory time required for testing. The proposed certification requirements for PHEV conversion systems, which include emission testing using the newly amended test procedures, ensure that the converted vehicle

continues to meet the original emission standards under the warranty provided to the consumer.

The proposed amendments and certification requirements are expected to result in minimal economic impacts. Additional emissions testing required for PHEVs may result in an incremental cost of up to \$15 per vehicle. The proposed certification PHEV conversion system procedures open an opportunity for Conversion System Manufacturers to enter the in-use vehicle market. In addition, the proposed certification procedures prevent the illegal sale of converted vehicles.

ORAL TESTIMONY:

Steven Douglas, Alliance of Automobile Manufacturers
Ed Kulik, Ford Motor Co.
Tommy Chang, Honda
Spencer Quong, Union of Concerned Scientists
Randy Reisenger, CalCars
Sanjeev Choudhury, A123 Systems
Patrick Huberty, Plug-In Conversions Corp.
Andrew Burnette, InfoWedge
Richard Hatfield, KillaCycle
Daniel Sherwood, 3 Prong Power Inc.
Paul Guzyk, 3 Prong Power Inc.
Robb Protheroe, Plug-In Supply Inc.
Charles Prothrerroe, Plug-In Supply Inc.
Ben Jones, Plug-In Supply
Marston Schultz, Individual AL
Paul Kydd, Partnerships 1, Inc.
Jeanie Trombley, Plug-In America

FORMAL BOARD ACTION:

The Board unanimously approved the proposed amendments to the regulations and incorporated test procedures for exhaust, evaporative, and refueling emissions from plug-in hybrid electric vehicles (PHEV). The amendments were approved with modifications, subject to a 15-day supplemental comment period.

The Board also requested staff to work with PHEV conversion system manufacturers on the certification procedures for PHEV conversion systems to determine if further development of the procedures is needed. The Board directed staff to return to the Board within several months to continue the Board's consideration of the proposed adoption of section 2032, title 13, California Code of Regulations and its incorporated procedure—the California

Certification and Installation Procedures for Off-Vehicle Charge Capable Conversion Systems for 2000 and Subsequent Model Year Hybrid Electric Vehicles.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

09-1-9 Public Meeting to Consider Appointment of Members to the Regional Targets Advisory Committee for Senate Bill 375

SUMMARY OF AGENDA ITEM:

On January 23, 2009, the Board appointed a slate of 21 members to sit on the Regional Targets Advisory Committee (RTAC) for Senate Bill 375.

Senate Bill 375 (Chapter 728, Statutes of 2008), directs ARB to appoint RTAC members by January 31, 2009, to recommend factors and methodologies for the Board to use when setting passenger vehicle greenhouse gas emission reduction targets for the 18 metropolitan regions of the State. RTAC is directed to transmit a report with its recommendations to the Board no later than September 30, 2009.

Staff proposed the following 21 individuals to sit on the RTAC:

- Andrew Chesley, Executive Director, San Joaquin Council of Governments
- Stuart Cohen, Executive Director, TransForm
- Greg Devereaux, City Manager, City of Ontario
- Roger Dickinson, Supervisor, County of Sacramento
- Stephen Doyle, President, Brookfield San Diego Builders, Inc.
- Amanda Eaken, Policy Analyst, Natural Resources Defense Council
- Gary Gallegos, Executive Director, San Diego Association of Governments
- Steve Heminger, Executive Director, Bay Area Metropolitan Transportation Commission
- Richard Katz, Board Member, Los Angeles County Metropolitan Transportation Authority
- Arthur Leahy, Chief Executive Officer, Orange County Transportation Authority
- Shari Libicki, Principal, Environ Environmental Consultants
- Mike McKeever, Executive Director, Sacramento Area Council of Governments

Pete Parkinson, Vice President of Policy and Legislation,
American Planning Association, California Chapter

Linda Parks, Supervisor, County of Ventura and SCAG
Regional Council Member

Manuel Pastor Jr., Professor of Geography and American
Studies and Ethnicity, University of Southern California

Michael Rawson, Co-Director, Public Interest Law Project

Barry Wallerstein, Executive Officer, South Coast Air Quality
Management District

Jerry Walters, Principal, Fehr and Peers Transportation
Consultant

Carol Whiteside, Founder and President Emeritus, Great Valley
Center

Michael Woo, Los Angeles City Planning Commissioner

Jim Wunderman, President and Chief Executive Officer, Bay Area
Council

The Board appointed all of the RTAC members proposed by ARB staff.

ORAL TESTIMONY:

Robert Phipps, Kern Council of Governments

R. Gregg Albright, Business, Transportation & Housing Agency

Moira Topp, Orange County Transportation Authority

Matthew Baker, ECOS

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 09-7, which appointed 21
members to sit on the RTAC.

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: No