

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
December 11 & 12, 2008

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

MEMBERS PRESENT: Mary Nichols, Chairman
Ms. Sandra Berg
Dr. John Balmes
Ms. Dorene D'Adamo
Mayor Ronald Loveridge
Mrs. Barbara Riordan
Supervisor Ron Roberts
Professor Daniel Sperling
Dr. John Telles

Agenda Item #

08-10-2: Continuation from the November 20 and 21, 2008, Board Meeting: Public Meeting to Consider the Approval of Assembly Bill 32 (AB 32) Scoping Plan to Reduce Greenhouse Gas Emissions in California

SUMMARY OF AGENDA ITEM:

The Climate Change Proposed Scoping Plan was released on October 15, 2008, and was discussed by the Air Resources Board (ARB or Board) at the October and November Board meetings. Because the December Board meeting was a continuation of the November Board meeting, there was no additional staff presentation. Staff prepared a draft resolution and proposed changes to the Plan reflect Board discussion and public testimony at the November Board meeting, as well as written comments submitted since the release of the Proposed Scoping Plan.

Sixty-three people testified at this public hearing. Witnesses were generally supportive of the Proposed Scoping Plan, but many also expressed concerns about the economic analysis, the cap-and-trade program, forestry fuels management issues, and regional transportation-related and land use-related greenhouse gas emissions reductions.

After the public testimony, Chairman Nichols asked for staff to explain how a variety of issues were dealt with in the proposed resolution, which was followed by Board discussion. These issues included the role of local air pollution control/air quality management districts and the role of the public health community in the implementation of AB 32, the cumulative public health impacts of regulations that will be developed to implement AB 32, the land use target, the cap-and-trade program, and the economic analysis of the Scoping Plan.

With respect to the role of the air districts, ARB staff committed to work with the districts to develop a work plan to identify specific activities the air districts will undertake in implementing AB 32 regulations. In addition, staff acknowledged that work performed by the air districts should be funded, with revenues yet to be identified. ARB will also provide free verifier training to air district staff, and will help develop a software tool allowing the exportation of greenhouse gas emissions data to the districts. Chairman Nichols acknowledged the importance of the air districts' expertise, but also pointed out that the development of the cap-and-trade program would need to occur at the State level, rather than at the district level. Ms. Berg encouraged ARB and the districts to ensure that no duplication occurs.

On the role of the public health community, ARB committed to creating a work group with a variety of public health agencies and organizations, developing methodologies to study cumulative impacts of regulations to implement AB 32, and using available methods to identify communities that are most adversely impacted by air pollution. Dr. Balmes pointed out the value to ARB of work being done by the California Department of Public Health in tracking the health effects of climate change.

The land use discussion generally revolved around the goal for reduction of emissions from this sector. Staff proposed using the Regional Targets Advisory Committee (RTAC) process from the recently-passed SB 375 to help set the target number, rather than consider the currently-stated 5 million metric tons of CO₂-equivalent (MMT_{CO₂E}) as the maximum achievable target. Members of RTAC will be proposed for appointment by the Board in January 2009. Professor Sperling noted that the estimated reduction of greenhouse gas emissions in the Scoping Plan will be adjusted to reflect the Board's decision on the SB 375 targets. Ms. D'Adamo stated that she believes the target should be higher than 5 MMT_{CO₂E}, but is optimistic about the process for moving forward on this issue. Supervisor Roberts said that for San Diego County, the 5 MMT_{CO₂E} target will be very difficult to reach, but that he looks forward to the process for determining the appropriate target. Mayor Loveridge underscored the importance of

SB 375, and of local governments as partners to ARB. Supervisor Roberts acknowledged the difficulties inherent in the fact that public transit funding has been cut, while the need for improved public transportation has become and will continue to be critical in meeting local land use regional transportation targets.

Finally, staff discussed the design elements that will need to be considered in the development of the cap-and-trade program. Program Evaluation Branch Chief Kevin Kennedy pointed out that there are many decisions yet to be made with respect to the cap-and-trade regulations including: the allowance distribution method, limits on use of offsets, the level of the cap, and how quickly the cap should decline over time. The proposed resolution includes a statement that 100 percent auction is a goal ARB will pursue over time. Mr. Kennedy expressed the need to gather expert advice on many of the key cap-and-trade issues, including on the more detailed economic analysis that will be needed. Chairman Nichols pointed out some of the challenges in designing and implementing the cap-and-trade program including the need for very detailed and extensive monitoring and enforcement mechanisms, and the need for much more information than is required for source-by-source regulation. But the goal of a cap-and-trade program, she said, is to provide a more flexible and cost-effective way to reduce emissions than is typical with a traditional regulatory program. Ms. D'Adamo underscored the importance of the planned additional economic analysis to the development of a cap-and-trade program.

ORAL TESTIMONY:

Randal Friedman, U.S. Navy
Major Jeremy Jungreis, Marine Corps Installations West
Audrey Chang, Natural Resources Defense Council
Michelle Pielsticker, California Taxpayers Association
Amisha Patel, California Chamber of Commerce, AB 32
Implementation Group
Kristina Skierka, Sustainable Silicon Valley
Dorothy Rothrock, California Manufacturers and Technology
Association, AB 32 Implementation Group
Janet Abelson, El Cerrito City Council
Rick Row, Sustainable Silicon Valley
Greg Karras, Communities for a Better Environment
Julia May, Communities for a Better Environment
Therese McMilan, Metropolitan Transportation Commission
Mike McKeever, Sacramento Area Council of Governments
Autumn Bernstein, ClimatePlan
Steve Brink, California Forestry Association
Catherine Reheis-Boyd, Western States Petroleum Association

Edmond Lombard, California Black Chamber of Commerce
Ken Cooley, City of Rancho Cordova, League of California Cities
Jim Gray, City of Roseville
Larry Forester, City of Signal Hill
Janice Keating, City of Modesto
Linda Park, Ventura County, Southern California Association of
Governments
Diane Dillon, Napa County, California State Assoc. of Counties
Linda Arcularius, Inyo County, Regional Council of Rural Counties
Tara McClanahan, Yadari Enterprises, California Black Chamber
of Commerce
Bernadette Del Chiaro, Environment California
Ken Johnson
Chris Busch, Union of Concerned Scientists
Norman Pedersen, Southern California Public Power Authority
Michael Rubio, Kern County, San Joaquin Policy Council
Martin Hopper, M-S-R Public Power Agency
Rachel Katz, Pacific Forest Trust
Michelle Pasero, The Nature Conservancy
Barry Wallerstein, South Coast Air Quality Management District
Peter Montgomery, California Building Industry Association
Emanuel Jones, Hugh Bower ESQ.
Max Ordonez, California Hispanic Chambers of Commerce
Adam Stern, TerraPass
Chris Brown, Mendocino County Air Quality Management District
Naomi Kim, California Environmental Rights Alliance
Jane Williams, Environmental Justice Advisory Committee
Ernie Silva, Coalition for Adequate School Housing
Bill Magavern, Sierra Club California
Tara Marchant, Greenlining Institute
Tim Carmichael, Coalition for Clean Air
Matt Vander Sluis, Planning and Conservation League
Amy Kyle, UC Berkeley School of Public Health
Norman Plotkin, Plotkin Zins & Associates, LLC
Alfredo Medina, Latino Issues Forum
Barbara Lee, California Air Pollution Control Officers Association,
Northern Sonoma County Air Pollution Control District
Sarah Skikne, The Climate Group
Vladimir Kogan, Orange County Sanitation District
David Bolland, Association of California Water Agencies
Tim Frank, American Farmland Trust
Peter Cooper, California Labor Federation
Lisa Wilcox, Pasadena City College
Jesse Marquez, Coalition for a Safe Environment
Brent Newell, Center on Race, Poverty, and the Environment
James Duran, California Hispanic Chamber of Commerce
Bonnie Holms-Gen, American Lung Association of California
Bob Johnston, UC Davis

Clayton Miller, Lewis & Co., Building Industry Association of
Southern California
Eileen Tutt, California Environmental Protection Agency

FORMAL BOARD ACTION:

The Board approved Resolution 08-47 by a unanimous vote. In Resolution 08-47, the Board initiated steps toward the final approval of the Proposed Climate Change Scoping Plan and its Appendices, with modifications identified at the December 11, 2008, public hearing, subject to the Executive Officer's approval of written responses to environmental issues that have been raised.

RESPONSIBLE DIVISION: Office of Climate Change

STAFF REPORT: No

08-11-1: Health Update: Lung Cancer by Occupation in the United States Trucking Industry

SUMMARY OF AGENDA ITEM:

The Research Division provides the Board with regular updates on recent research findings on the health effects of air pollution. This month, staff presented the most recent report from an ongoing nationwide study of the health impacts in a large group of workers in the unionized United States Trucking Industry. The study compared lung cancer deaths by occupation. The investigators found an increased risk for lung cancer mortality in workers with jobs associated with regular exposure to diesel and other vehicle exhaust, and the risk increased with more years on the job. The calculated increased risk associated with an estimated 20 years in the same job, as compared to all workers, ranged from 65 percent to 120 percent for long haul, dockworkers, pick up and delivery and combination workers (who work as both pick up and delivery drivers and dockworkers). The increase in risk was not seen in clerks, mechanics or hostlers. The results of the study are consistent with previous studies and imply that reduction of diesel PM emissions will have health benefits for workers in the trucking industry who are associated with jobs where they are often exposed to diesel and other vehicle exhaust

Dr. John Balmes noted that this study is the most recent in a series of investigations in this group of workers in the trucking industry. Dr. Balmes also noted that the effects of diesel exposure in railroad industry workers was used to help determine that diesel PM is a cancer risk and was used in ARB determination of diesel PM as a

Toxic Air Contaminant. Dr. John Telles asked about possible cardiovascular effects. Cynthia Garcia noted that an increased risk of death from ischemic heart disease was seen in this same group of workers and this was reported in the January 2008 health update to the Board.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: Informational Item

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

08-11-3: Public Hearing to Consider Adoption of a Proposed Regulation to Reduce Emissions from In-Use On-Road Diesel Vehicles, and Amendments to the Regulations for In-Use Off-Road Vehicles, Drayage Trucks, Municipality and Utility Vehicles, Mobile Cargo Handling Equipment, Portable Engines and Equipment, Heavy-Duty Engines and Vehicle Exhaust Emissions Standards and Test Procedures and Commercial Motor Vehicle Idling

SUMMARY OF AGENDA ITEM:

Existing heavy-duty diesel vehicles are among the largest contributors to fine particulate matter (PM_{2.5}) and ozone forming emissions in the State. They produce approximately 40 percent of the statewide emissions of oxides of nitrogen (NO_x) and about 32 percent of the statewide PM emissions generated by diesel mobile sources. These emissions have significant adverse health impacts, causing, among other things, an estimated 4,500 premature deaths in California in 2008. To address these health impacts, ARB approved a new regulation for in-use on-road diesel vehicles (the truck and bus regulation), as well as amendments to several other existing ARB regulations.

The approved truck and bus regulation is one of the most significant elements of the State's overall strategy to reduce oxides of nitrogen (NO_x) and particulate matter (PM) emissions to help meet emission reduction commitments in the State Implementation Plan. In addition, controlling emissions from the existing diesel on road fleet is also necessary to meet the 2020 goal of ARB October 2000 Diesel Risk Reduction Plan to reduce California's diesel PM and associated cancer risk 85 percent from 2000 baseline levels.

The regulation will affect heavy-duty diesel vehicles with a gross vehicle weight rating greater than 14,000 pounds, yard trucks with off-road certified engines and certain diesel fueled shuttle vehicles of any weight. It will apply equally to all persons and businesses that operate vehicles in California, whether based in-state or out-of-state. The regulation will also establish requirements for any in-state or out-of-state motor carrier, California-based broker, or any California resident who hires or dispatches vehicles subject to the regulation. California sellers of a vehicle subject to the proposed regulation will have to disclose the regulation's potential applicability to buyers of the vehicles.

In general, the regulation will require owners to reduce PM and NOx emissions from their fleets by upgrading their vehicles to meet specific performance standards (defined as best available control technology, or BACT) for these pollutants. The BACT standard for PM is an engine equipped with a diesel particulate filter, and the BACT standard for NOx is an engine newly manufactured in 2010 or later or a 2010 emissions equivalent engine. A fleet may meet these performance requirements by retrofitting a vehicle with a verified diesel emission control strategy (DECS) that will achieve PM or NOx reductions or both as required, replacing an engine with a newer cleaner one, or replacing a vehicle with one having a cleaner engine. The regulation provides three options for complying with the PM and NOx performance requirements. As part of the regulation's overall flexibility, the replacement vehicle need not be new.

Starting January 1, 2011, fleets will be required to install PM verified DECS for certain engine model years. The regulation then requires owners to reduce both PM and NOx emissions from the fleet by accelerating engine or vehicle replacement between January 1, 2013, and the end of 2022, so that by January 1, 2023, all engines would be the cleanest available—that is, a 2010 or later model year engine or one retrofitted to achieve equivalent emission reductions. Small fleets—those with one to three vehicles—are exempt from the PM and NOx cleanup requirements until January 1, 2014. School buses would be exempt from the NOx requirements, except that pre-1977 model-year buses would need to be replaced.

ARB also approved amendments to several existing regulations to ensure that these regulations and the truck and bus regulation do not create overlapping requirements for the same vehicles. The changes also clarify a number of issues with the existing regulations, provide additional compliance flexibility and generally improve enforceability of the existing regulations. ARB approved amending existing regulations for in-use off-road diesel vehicles, mobile cargo handling

equipment at ports and intermodal rail yards, in-use on-road diesel fueled heavy duty drayage trucks, on-road heavy duty diesel fueled vehicles owned or operated by public agencies and utilities, limits on diesel-fueled commercial motor vehicle idling, exhaust emission standards and test procedures for 1985 and subsequent model heavy duty engines and vehicles, portable diesel engines rated at 50 horsepower and greater, and the portable equipment registration program.

At the hearing, staff proposed a number of modifications to staff's original proposal, and the Board approved the following modifications to the originally proposed truck and bus regulation:

- Add a new provision that would grant a retirement credit, until January 1, 2014, to a fleet that retires a vehicle on or after July 1, 2008;
- Provide additional hours of use, until 2014, for two-engine sweepers that are used for back-up service;
- Provide an additional year for fleets of one vehicle to meet applicable NOx and PM performance requirements; and
- Delay the replacement requirements for motor coaches until January 1, 2017.

A total of 201 witnesses testified on the proposed truck and bus regulation—74 in support, 104 opposed, and 23 neutral. In addition, over 3,000 postcards were submitted in support of the regulation. Those in support included health and environmental advocates, the South Coast Air Quality Management District, the Sacramento Air Quality Management District, the Bay Area Air Quality Management District, the San Joaquin Valley Air Pollution Control District, the National Parks Association, and the Air Director for the United States Environmental Protection Agency's Regional Office in San Francisco. Investor-owned utilities and the Crane Owners' Association also supported the regulation. The California Bus Association and representatives of agricultural associations adopted a neutral position. Those who opposed the regulation included a large number of trucking companies, the California Trucking Association, American Trucking Association, California Dump Truck Owners Association, California Moving and Storage Association, and the Mendocino County Board of Supervisors. Representatives of various school districts also spoke in opposition to the regulation. The Executive Director of the California Pollution Control Financing Authority (CPCFA) presented information on the financial assistance program designed by CPCFA and ARB staff to help truck owners pay for their compliance with the new regulation.

Those testifying in opposition identified a number of issues with the regulation, including the following:

- The high cost of the regulation and the inability of many owners to pass on the cost to their customers;
- The expected loss in profitability and the likelihood of jobs being lost as a result of owners being driven out of business or having to scale back their operations;
- The support for an alternative industry proposed compliance schedule that would provide more time to upgrade existing fleets and lessen the cost impacts;
- The increase in the number of vehicles for sale driving down the resale value of vehicles, making it more difficult for owners to finance new equipment purchases and increasing their debt;
- Limited availability of affordable financing, particularly in the current economic climate;
- Ineligibility of lower mileage drivers for incentive funds that might help reduce the cost of cleaning up their trucks;
- The challenge of retrofitting vocational vehicles;
- The cumulative impact of the regulation on companies subject to other in-use diesel regulations; and
- The importance of effective uniform enforcement to prevent any entity from obtaining an unfair competitive advantage.

ORAL TESTIMONY:

Michael Delbar, (elected) Mendocino County
Jack Broadbent, Bay Area Air Quality Management District
David Piech, JD Navistar Engine Corporation
Alvan Mangalindan, Crane Owners' Association and Association of Crane Rental Contractors
Rob Goliti, Midnight Express Trucking, Inc.
Wendy Mitchell, W.M. Consulting for Investor-Owned Utilities
David Allen, Alenco Consulting Group
Matthew Marsom, Public Health Institute
Jay McKeeman, California Independent Oil Marketers Association
Linda Weiner, American Lung Association of California
Dr. Janet Abshire, CA Medical Association
Bonnie Holmes-Gen, American Lung Association
John White, Clean Power Campaign
Ryan Wiggins, Communities for Clean Ports
Dr. Joseph Kubsh, Manufacturers of Emission Controls Association
Andy Garcia, GSC Logistics
Scott Taylor, GSC Logistics
Alan Osofsky, Rodgers Trucking Company
Doug Britton, Britton Trucking
Henry Hogo, South Coast AQMD

Sam Zugzda, Leonard's Diesel Repair, Inc.
Michael Graboski, American Rental Association
Bob Ramorino, Roadstar Trucking
Matt Cohen, Solpower Corp & Clean Fuels Resources
Patty Senecal, CA Government Affairs IWLA
Barry Broad, CA Teamsters Public Affairs Council
Charles Diaz, Charles Diaz Trucking, Inc.
Tom Carroll, Shasta Union High School District
Roger Isom, CA Cotton Ginners and Growers Association
Allan Lind, California Council for Environmental and Economic
Balance
Steve Brink, California Forestry Association
Sayed Sadredin, San Joaquin Valley Air Pollution Control District
Oralia Ornelas, Juarez Bros. Trucking, Inc.
Michael Collier, C.D. Matthes Trucking Company.
Paul Trump, Mike Campbell & Associates
Gayle Lopopolo, Ganduglia Trucking
Jim Ganduglia, Ganduglia Trucking
Dan Souza, Mountain Valley Express
Scott Blevins, Mountain Valley Express
Albert Nunes, AC Trucking
Brian Rood, Colonial Life
Wayne Teece, Dispatch Transportation
Kenny Lloyd
Perry Shusta, Arrowhead Towing
George Little, CA Tow Truck Association (CTTA)
Glenn Neal, CTTA
Bob Berry, Berry Brothers Towing
Mark Castro
Stephen Rhoads, Strategic Education Services
Anna Arriola, East Yard
Seth Hammond, Specialty Crane
Lee Steinberg, Crane
Jim Lyons, Sierra Research
Matthew Schrap, California Trucking Association (CTA)
Brian Rees, CA Poultry Federation
Shirley Batchman, California Citrus Mutual
Kent Johnson, AG Production
Gary Montgomery, Montgomery Transfers
Cynthia Cory, CA Farm Bureau Federation
Kathy Fitzgerald, Fitzgerald Truck Sales
Jean Etcheverry, Antonini Fruit Express
Mike Anderson, Anderson Logging Inc.
Myles Anderson, Anderson Logging Inc.
Ed Walker, Robinson Enterprises, Inc.
Eric Carleson, Associated California Loggers
David Hagen, RSI Insurance Brokers
Eric Bassett, Riverview International Trucks Inc.

J. Michael Martensson, California Groundwater Association
Joe Rosa, Renner Petroleum
Doug Van Allen, BJ Services, Co.
Allen Burmeister, BJ Services Co.
James Thomas, Nabors Well Services Co.
Chris Torres, F&L Farms Trucking, Inc.
Lee McCorkle, McCorkle Trucking
Kevin Abernathy, Cal Dairy Campaign
Christopher Valadez, California Grape and Tree Fruit League
Steve Lopes, Western States Oil Company
Daniel Del Moro, PVM Transportation
Melissa Kelly-Ortega, Merced Asthma Coalition
Brent Newell, Center on Race, Poverty, and the Environment
(CRPE)
Deborah Jordan, US EPA
Larry Robinson, Mark Stein Beverage Company
Robert Meagher, Sierra Sacramento Valley Medical Society
Jenny Saklar, Fresno Metro Ministry
Mario Talavera, Latinos Unidos Concientizados al Ambiente
John Yandell, Yandell Truckaway, Inc.
Angelo Logan, East Yard Communities
Michael Tunnell, American Trucking Association
Martin Lassen, Johnson Matthey Catalysts
Angel Raposa, California Dump Truck Owners Association
(CDTOA)
Dr. John Balbus, Environmental Defense Fund
Brandon Kitagawa, Community Action to Fight Asthma
Nick Pfeifer, Granite Construction, Inc.
Josh Pane, California Bus Association
Mike Waters, California Bus Association
Allen Faris, Allen Faris Trucking
Joel Errice, Regional Asthma Management and Prevention
Denny Wyatt, APEX Bulk Commodities
Melissa Stephens, American Lung Association
Daniel Speth, DLS Trucking
Patti Pirkle, Pirkle Trucking & Equipment Rental, Inc.
John Pitta, John Pitta Trucking
Dennis Downing, Downing Trucking
Catherine Garoupa, Madera Coalition for Community Justice
Marybelle Nzegwu, Center on Race, Poverty, and the Environment
Diane Bailey, Natural Resources Defense Council
Bill Terrell, Genesis Construction
Susan Jones, D&S Trucking, CDTOA
Liza Bolanol, Central Valley Air Quality Coalition
Jeremy Jungreis, Marine Corps Installations West
Randal Friedman, US Navy
Tony Luiz, T&L Trucking LLC
Bruce Wick, CA Professional Association of Specialty Contractors

Tessa Woodmansee
Skip Brown, Delta Construction Company
Enrique Arriola, East Yards
Betty Plowman, CDTOA
David Norris, Lakeport Unified School District
Brian Cohen
Michael Rea, West County Transportation Agency
Don Anair, Union of Concerned Scientists
Anna Sanchez, Merced Mariposa County Asthma Coalition
Mary-Michal Rawling, Golden Valley Health Centers
Camron King, CA Association of Winegrape Growers
Susan King, CA Nurses Association
Michael Papanian, CA Pollution Control Financing Authority
Dan Sartell, Button Transportation
Betsy Reifsnider, Catholic Charities Diocese of Stockton
Irvin Dawid
Carol Pruett, CDTOA
Steve Shamp, Customer Truck Service
Sofia Sarabia, CRPE
Bill Magavern, Sierra Club CA
Greg Pile, Chaparral Honey, Inc.
Andy Katz, Breathe CA
Vania Ahamdi, Healthy 880 Committee
Christine Cordero, Center for Environmental Health
David Atwater, Van De Pol Enterprises, Inc.
Anna Lee, Communities for a Better Environment (CBE)
Ron Faulkner, Faulkner Trucking
Glenda Deloney, CBE
Tiana Drisker, CBE
Jason Schmelzer, California Chamber of Commerce
Brian Davis, Breathe CA
Ed Welch, Save the Air in Nevada County
Cheryl Moore, Mendocino Redwood Company
Camille Kustin, Environmental Defense
Brian Beveridge, West Oakland Indicators Project
Bill Gassaway, Gassaway Enterprises
Dick Stuart, Maxim Crane Works
Lowell Robinson, Robinson Ent. , Inc.
Brad Edgar, Cleaire Advanced Emission Control
Stephen Rhoades for John Clements, Kings Canyon Schools
Gale Plummer, Cleaire Advanced Emission Controls
Larry Green, Sacramento Air Quality Management District
Michael Mach, Oakland High School
Jill Ratner, Rose Foundation
Steve Roberts, STR Transport
Blanca Nunez, Pacoima Beautiful
Jorge Villanueva, Pacoima Beautiful
Steve Azevedo, Knife River Corp.

Rick Bettis, Breathe CA
Steve Weitekamp, California Moving and Storage Association
Manuel Cunha Jr., Nisei Farmers League
Ricky Tran, E.S.A., Oakland High School
Dennis MacFarland
Lan Dahn, Southwest Transportation
Charlie Simpson, EM Tharp
Paul Buttner, CA Rice Commission
Laura Fultz Stout, Coalition for Clean Air
Mark Matheson, Matheson Trucking
Felipe Lopez, Consejo de Federaciones de Estados Mexicanas
Charlie Rea, California Construction and Industrial Materials
Association
Luz Elena Tafalla, Consejo de Federaciones de Estados
Mexicanos
Dr. Richard McCann, Aspen Environmental Group
Gavin McHugh, California Manufacturers and Technology Association
Mark Sisco
Jason Osborn, Manteca Unified School District
Stephen Rhoades, Riverside County Schools
Christine Foster, Tulare County Asthma Coalition and Community
Action to Fight Asthma (CAFA)
Jacquie Hansen, Breathe CA
Eric Sauer, CTA
Julie Sauls, CTA
Marshall Woodmansee
Jill Gayaldo, Elk Grove Unified School District
Ray Kidd
Matt Griffin, Matthew Griffin Trucking
Sophia Woodmanse
Michael Lewis, Construction Industry Air Quality Coalition
Paul Schlenvogt, Washington Professional Beekeepers Association
William E. Davis, Southern CA Contractors Association
Nidia Bautista, Coalition for Clean Air
Sean Edgar, Clean Fleets Coalition
Sharon Banks, Cascade Sierra Solutions
Janice Kim, American Academy of Pediatrics
Sean Realite
Tim Gibbs, National Parks Conservation Association
Marie Witte, Mike Roche, Inc.
Stephanie Roche, Mike Roche, Inc.

FORMAL BOARD ACTION:

The Board unanimously adopted the proposed Resolution 08-43, approving the original staff proposal with the modifications distributed by staff at the hearing and the following additional modifications:

- Postponement of the initial compliance deadline for small fleets (three or fewer trucks) from January 1, 2013, to January 1, 2014;
- Revision of the starting date of the retirement credit to July 1, 2008—six months earlier than the date proposed in the modifications distributed by staff.

Staff was directed to evaluate the impacts of the particulate matter performance requirements of the regulation on trucks operating exclusively in the attainment areas identified in the regulation as NOx-exempt areas, and report their findings to the Board at the next regularly scheduled Board meeting in January 2009.

The Board also directed staff to do the following:

- Monitor the state of the economy and report to the Board by the end of 2009 on its impact on the trucking industry and emissions;
- Update the Board at the end of 2009 on the school bus transportation industry, including information on both district owned and privately owned fleets, outreach efforts to affected owners, and the availability and use of funding;
- Conduct workshops to ensure that owners understand the available financing options and report to the Board by the end of 2009 on feedback from owners and the results of staff's efforts to fund projects;
- Develop a courtesy inspection program to provide compliance assistance to fleets;
- As part of staff's implementation efforts, provide guidance materials on verified retrofit devices, including potential operating constraints, that are understandable to owners and would help them make decisions that are appropriate for their specific vehicle operations; and
- Conform the amendments to the drayage truck regulation to the drayage truck provisions adopted in the truck and bus regulation.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

08-11-4:

Public Hearing to Consider the Adoption of a Regulation to Reduce Greenhouse Gas Emissions from Heavy-Duty Vehicles

SUMMARY OF AGENDA ITEM:

The California Global Warming Solutions Act of 2006 (AB 32) creates a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California, with the overall goal of restoring emissions to 1990 levels by the year 2020. The proposed regulation is designed to implement the “Smartway Truck Efficiency” measure which has been identified as a Discrete Early Action Measure under AB 32. The proposed regulation references the United States Environmental Protection Agency SmartWay Partnership Program (SmartWay program), which approves technologies, such as aerodynamic equipment and low-rolling resistance tires, and certifies tractors and trailers that incorporate these technologies.

The Board considered staff’s proposal to adopt regulations to establish requirements for new and existing 53-foot or longer box-type trailers and the long-haul tractors that pull them (affected tractors and trailers) that travel in California; it would apply to both California-registered and out-of-state-registered tractors and trailers. The proposed regulation would apply to owners, drivers, motor carriers, California-based brokers and California-based shippers that own, operate, dispatch or ship using affected tractors and trailers.

Two optional trailer fleet compliance schedules, based on fleet size, would allow fleets more flexibility to comply with the trailer requirements. Small fleets with 20 or less trailers would begin compliance beginning 2013 and complete their compliance phase-in by December 31, 2016. Large fleets with 21 or more trailers would begin compliance beginning 2010 and complete their compliance phase-in by December 31, 2015. Also, additional time would be offered for vehicles subject to another ARB regulation, the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. This flexibility would provide 2003 to 2008 model year refrigerated van trailers a delayed compliance period that begins in 2017 and ends in December 31, 2019.

Implementation of the proposal would provide GHG and NOx emission reductions in California. Tractor-trailers that comply with the proposal would achieve a 7 to 10 percent fuel efficiency improvement, resulting in a reduction in tailpipe GHG emissions of approximately 1 MMTCO₂E statewide in 2020, and approximately 6.7 MMTCO₂E nationwide. The cumulative GHG reductions in California from 2010 to 2020 would be 7.8 MMTCO₂E statewide

and 52.1 MMTCO₂E nationwide. The proposal would also provide NO_x reductions of 4.3 tons per day in 2014 and 1.4 tons per day in 2020.

Owners of affected tractors and trailers would incur capital costs for the initial purchase and installation of aerodynamic technologies and low-rolling resistance tires, approximately \$5,000. Based on the industry average trailer-to-tractor ratio of 2.5 to 1, owners would spend, on average, \$9,200 to bring them into compliance. A state guarantee loan program will be available to help finance the purchase of technologies to comply with these requirements.

Operating cost savings resulting from this proposal would be substantial. For example, in 2010, assuming that most compliant tractor-trailers realize an 8 percent fuel economy gain at highway speeds, and that diesel fuel is priced at \$3.14 per gallon, the net savings would be approximately \$4,200 per year for a tractor-trailer combination. The fuel savings would fully offset the initial cost of the SmartWay equipment in less than 15 months. This net savings, realized by fleet operators and owner-operators of compliant tractors and trailers, is directly attributed to operating cost savings associated with improved fuel economy. Overall, the benefits of this proposed regulation are approximately two times greater than the cost.

Some concern has been expressed by stakeholders that the aerodynamic equipment required by the proposal might create safety hazards should the equipment become damaged and dislodge while driving, particularly when operating in inclement weather or when navigating steep inclines. To address this concern, staff consulted with fleets that currently use the equipment. These fleets did not report any serious damage problems. Staff also consulted with the aerodynamic equipment manufacturers, who are continuing to improve their products to adapt to steep inclines and cold weather challenges.

Some stakeholders have asked why the scope of this proposal has been limited to long-haul, 53-foot or longer, box-type trailers and the tractors that pull them, when additional GHG benefits could be achieved by broadening the applicability of the proposal. Given the short timeframe of this early action measure, staff focused on those technologies that result in the greatest benefits from fleet vehicles and that have been approved by the SmartWay program.

ORAL TESTIMONY:

Witness testimony for staff's proposal was heard in combination with the proposed Truck and Bus Regulation (08-11-3) as part of a

combined proposed “Strategy to Reduce Emissions from On-Road Diesel Vehicles.” Thus, 44 witnesses testified on the proposed heavy-duty vehicle GHG regulation. Of these, 24 witnesses testified in favor, 1 was neutral, and 19 testified against the proposal. Those individuals included the following:

Michael Delbar, Mendocino County
Rob Goliti, Midnight Express Trucking Company
David Allen, Alenco Consulting Group
Matthew Marsom, Public Health Institute
Bonnie Homes-Gen, American Lung Association of California
Sean Graham, Freight Wing, Inc.
Ron Hall, C.R. England Inc.
David Kayes, Ph.D., Daimler Trucks
John Fleck, Deflektor
Robert Tichelman, Windyne
Patty Senecal, California Government Affairs, International
Warehousing and Logistics Association
Barry Board, California Teamsters Public Affairs Council
Charles Diaz, Charles Diaz Trucking, Inc.
Gary Gaussoin, Silver Eagle Manufacturing Company
Michael McDaniel, Continental Tire
Paul Trump, Mike Campbell and Associates
Andy Cox, Mike Campbell and Associates
Jim Ganduglia, Ganduglia Trucking
Albert J. Nunes, A.C. Trucking
Mike Shuemaker, Central Valley Trailer Repair, Inc.
Dan Miller, Save Mart Supermarket
Andrew Smith, ATDynamics
Neil Smith, Con-Way Freight
Anna Arriola, East Yard
Matthew Schrap, California Trucking Association
Brian Rees, California Poultry Federation
John Yandell, Yandell Truckaway, Inc.
Michael Tunnell, American Trucking Association
Diane Bailey, Natural Resources Defense Council
Andy Acott
Brian Cohen
Don Anair, Union of Concerned Scientists
Michael Papanian, California Pollution Control Financing Authority
Betsy Reifsnider, Catholic Charities Diocese of Stockton
Bill Magavern, Sierra Club of California
Kathy Rose, Nose Cone Aerodynamics
Ron Faulkner, Faulkner Trucking
Tiana Drisker, Communities for a Better Environment
Charlie Simpson, E.M. Tharp, Inc.
Micheal Collier, C.C. Matthes, Inc.
Mark Matheson, Matheson Trucking

Felipe Lopez, Consejo de Federaciones de Estados Mexicanas
Jacquie Hansen, Breathe California
Sharon Banks, Cascade Sierra Solutions

FORMAL BOARD ACTION:

The Board unanimously adopted Resolution 08-44, approving staff's proposal with 15-day notice modifications that were proposed at the hearing. The specific modifications proposed as 15-day changes included the following:

- Remove the 100-mile operating range exemption for the tire requirements, but keep the exemption for tractors that travel less than 50,000 miles annually, because tractors and trailers that accrue more than 50,000 miles per year, but stay within a 100-mile operating range, are likely to travel a significant portion of their mileage at highway speeds and will achieve greenhouse gas reductions;
- Remove the reporting requirement for refrigerated van trailers, because compliance would be determined by the model year of the trailer, and not based on plans made by the fleet owner. This change would remove a reporting burden and reduce cost to affected fleets;
- Exempt solid waste trailers, because these trailers often travel off-road to landfills; thus side skirts and low rolling resistance tires may not be appropriate for these trailers; and
- Other minor clarifying modifications.

The Board also expressed concern regarding how the SmartWay program certifies tractors. Staff was directed to report back to the Board in 2009 if aerodynamic performance-based standards have not been adopted in the SmartWay program for 2011 and subsequent model year tractors, and to make appropriate changes to the regulation as necessary.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

08-11-2:

Public Meeting to Consider Research Proposals

SUMMARY OF AGENDA ITEM:

Staff described the objective and expected results for the following research proposal: "Potential Design, Implementation, and Benefits of a Feebate Program for New Passenger Vehicles in California"

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

Board adopted resolution number 08-48, which approved the research proposal.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No