

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
July 22, 2004

Air Resources Board
Central Valley Auditorium
1001 I Street
Sacramento, California 95814

MEMBERS PRESENT: Hons. Alan C. Lloyd, Ph.D., Chairman
Joseph C. Calhoun, P.E.
Doreen D'Adamo
Mark DeSaulnier
William F. Friedman, M.D.
Barbara Patrick
Barbara Riordan

AGENDA ITEM #:

04-7-1: Health Update - Mechanisms of Particulate Matter Toxicity

SUMMARY OF AGENDA ITEM:

This month's health update summarized the findings of three recently completed ARB-funded research contracts that investigated the biological mechanisms of particulate matter (PM) toxicity. While epidemiological studies have clearly demonstrated an association between the exposure to ambient concentrations of PM and adverse health effects, further information is needed that explains the biological basis of PM's effect on public health. To fill this data gap, the ARB funded three University of California campuses (Davis, Irvine, and San Francisco) to conduct interrelated experiments designed to investigate how particles might induce adverse health consequences in asthmatic humans, as well as in two animal models. Each team of researchers investigated related questions, but from different perspectives. For example, the three groups investigated similar endpoints and used similar exposures in humans and in different animal models. The results from the studies suggest that particles of ammonium nitrate and elemental carbon, at concentrations that may occur on the very worst days, can induce adverse health effects in asthmatic humans (who are also exposed to ozone) and in both of the animal models studied. Although these studies only begin to address the mechanisms of particulate matter toxicity, the results presented provide critical information demonstrating a causal link for the associations

observed between PM exposure and cardiopulmonary morbidity and mortality.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

04-7-2: Public Meeting to Consider a Research Proposal

SUMMARY OF AGENDA ITEM:

“Characterization and Quantification of Emissions from Office Machines,”
University of California, Berkeley, Proposal No. 2551-243.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: The Board approved the research proposal in Resolution 04-24 by a unanimous vote.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

04-7-3: Public Hearing to Consider the Proposed Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

SUMMARY OF AGENDA ITEM:

Staff presented the Proposed Airborne Toxic Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The ATCM is designed to reduce exposure and associated adverse health effects due to diesel PM and other toxic air contaminants by limiting nonessential idling of diesel-fueled commercial motor vehicles with gross vehicular weight ratings (GVWR) of greater than 10,000 pounds.

The ATCM limits idling of subject vehicles to no more than 5 minutes at any location. Buses, including transit, tour and coach, are allowed 10 minutes of idling prior to boarding of passengers to

allow compartment acclimatization for comfort. Main engine idling or operating diesel-fueled Auxiliary Power System (APS) to provide power to a heater, air conditioner, or ancillary equipment, during federally mandated extended rest periods is limited to 5 minutes at any location when within 100 feet of a restricted area. The ATCM does not limit idling when necessary for safety or operational purposes.

As a result of comments received, the staff presented and the Board approved modifications to the original proposal released on June 4, 2004. The following is a brief summary of the modifications:

- Remove the January 1, 2009 idling restriction for trucks equipped with sleeper berths that limits the operation of the main engine or diesel-fueled APS to provide power to a heater, air conditioner, or ancillary equipment.
- Establish an ATCM effective date of January 1, 2005.
- Clarify that the ATCM applies to buses, including transit, charter, and coach.
- Clarify that the ATCM applies to both California and non-California based vehicles.
- Clarify that the ATCM idling restrictions do not apply while positioning equipment to ensure safe operations.
- Amend the ATCM to allow unrestricted idling of military tactical vehicles during periods of training.
- Clarify that the ATCM idling restrictions do not apply when idling is necessary to operate equipment such as a wheelchair or people lift as prescribed by the Americans with Disabilities Act.
- Clarify that the ATCM idling restrictions do not apply when operating the mixer drum of a concrete truck.
- Clarify that the ATCM idling restrictions do not apply during collection of solid waste or recyclable materials by an entity authorized by contract, license, or permit by a local government.

ORAL TESTIMONY:

Diane Bailey, Natural Resources Defense Council
Sean Edgar, Edgar & Associates, Inc.
Diane Estrin, Community Action to Fight Asthma
Margaret Gordon, Pacific Institute/West Oakland
Staci Heaton, California Trucking Association
Joni Low, American Lung Association, (Representing San Diego Regional Asthma Coalition)
Joseph Lyou, California Environmental Rights Alliance

David Modisette, California Electric Transportation Coalition
Patricia Monohan, Union of Concerned Scientist
Kurt Miller, Concerned Truck Driver & Owner
Shamar Parsad, Solano Asthma Coalition
Frank Petronzio, Southern California Ready Mix Concrete
Association
Peter Rooney, Pony Pak, Inc.
Ken Selover, California Army National Guard
Lisa Stegnik, Engine Manufacturer's Association
Mike Tunnell, American Trucking Association
Steven Wallauch, Greyhound Lines
Susan White, Solano Asthma Coalition
Jane Williams, California Communities against Toxics
Bob Wilson, IdleAire

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 04-23 approving the Proposed Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, with staff's proposed modifications.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

04-7-4: Report to the Board on Recent Development on Climate Change, Daniel Cayan, Ph.D. and Kristie Ebi, Ph.D., MPH

SUMMARY OF AGENDA ITEM:

Two outstanding scientists, Dr. Daniel Cayan from the University of California in San Diego and Dr. Kristie Ebi from Exponent Consulting in Virginia, were invited to give presentations about climate change and its impacts. The purpose of these presentations were to introduce the Board to recent scientific developments on climate change to prepare them for the climate change regulations that they will be considering at the September Board Hearing.

Dr. Cayan presented information about the impacts of climate change in California. He believes that the last few decades of temperature and other ancillary observations indicate a warmer climate over western North America. This warmer epoch is probably an early indication of the warmer conditions that are projected over the next several decades as global climate reacts to the buildup of greenhouse gases in the atmosphere.

Dr. Cayan concludes that climate model temperature projections, ranging from 1 to more than 5 degrees Celsius warming over the region in the next 100 years, would have substantial to enormous impacts on the climate, ecosystems, and the economy of California.

Board member Mrs. Riordan asked Dr. Cayan about the applicability of his projection to southern California since most of the results were drawn over northern California. Dr. Cayan indicated that the general trend is the same but details are different. Board member Professor Friedman asked if a higher range of increased precipitation over the future would be sufficient to supplant the loss of snow pack in terms of water supply. Dr. Cayan discussed the probability under different scenarios.

In the second presentation, Dr. Ebi summarized climate change and the implications for human health. She indicated that climate change is expected to have primarily negative consequences for public health. Weather and climate can affect human health both directly and indirectly. Direct impacts include adverse health consequences due to temperature extremes (e.g., heat waves) and extreme weather events. Indirect impacts include vector-borne diseases (such as diseases carried by mosquitoes and rodents), food- and water-borne diseases, and air pollution-related health effects. Given these and other potential health risks of climate variability and change, Dr. Ebi believes that the challenge is to find effective ways to reduce potential health impacts in the context of other needs and limited budgets. She concluded that increased understanding of population health vulnerabilities and targeted actions to reduce those risks will increase resilience to what the future does bring.

Board member Mrs. Riordan praised Dr. Ebi for her presentation. Chairman Dr. Lloyd asked Dr. Ebi for her perspective on the question of what is the point of doing anything in California since climate change is a global issue. Dr. Ebi emphasized that California can be held up as an example of a successful greenhouse gas emission reduction program not only for other states within the U.S., but also for the world.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

04-7-5: Public Hearing to Consider Proposed Amendments to the Unihose Dispenser Requirements in the Regulation for Certification of Vapor Recovery Systems of Dispensing Facilities (Gasoline Service Stations)

SUMMARY OF AGENDA ITEM:

Staff presented proposed amendments to the unihose gasoline dispenser requirements in the certification procedure for vapor recovery systems used at service stations. The Enhanced Vapor Recovery (EVR) Program, originally approved in March of 2000, is currently being implemented. Under EVR, all existing service stations must have Phase II vapor recovery systems that are compatible with fueling vehicles with onboard refueling vapor recovery (ORVR) by April 1, 2005. Upgrades to ORVR compatible systems can require modification of vapor piping in the dispensers.

The amendments remove language that triggers conversion to the unihose configuration when modifying vapor piping in the dispensers. The regulation will still require unihose dispensers for new facilities and when existing facilities replace more than 50% of the dispensers. The ORVR upgrade costs would be reduced to a range of \$3,000 to \$30,000 depending on the size of the station and the ORVR system chosen.

Based on comments received, staff agreed to return to the Board in November to present a recommendation regarding a one-year extension of the April 1, 2005, ORVR compatibility deadline.

ORAL TESTIMONY:

Larry Greene, President, California Air Pollution Control Officers Association

Jay McKeeman, California Independent Oil Marketers Association

Steven Arita, Western States Petroleum Association

Mark Kravis, Healy Systems, Inc.

FORMAL BOARD ACTION:

The Board voted unanimously and approved Resolution 04-21 adopting the proposed amendments to the vapor recovery certification procedure.

RESPONSIBLE DIVISION: Monitoring Laboratory Division

STAFF REPORT: Yes

04-7-6: Public Hearing to Consider Approval of a Revision to the State Implementation Plan (SIP) for Carbon Monoxide (CO)

SUMMARY OF AGENDA ITEM:

On July 22, 2004, the Air Resources Board approved the *2004 Revision to the California State Implementation Plan for Carbon Monoxide -- Updated Maintenance Plan for Ten Federal Planning Areas (2004 Update)* for ten planning areas that attained the federal air quality standard for CO since the early 1990s: Bakersfield, Chico, Fresno, North Lake Tahoe, South Lake Tahoe, Modesto, Sacramento, San Diego, San Francisco Bay Area, and Stockton. The 2004 Update extends the 1996 CO Maintenance Plan demonstration to 2018, updates the emission inventory, and proposes new on-road motor vehicle emission budgets for transportation conformity.

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 04-20 adopting the 2004 Update.

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: Yes

04-6-2: Report to the Board on an Update to the Implementation of ARB's Environmental Justice Policies and Actions: July 2004

SUMMARY OF AGENDA ITEM:

Staff of the Air Resources Board presented the Board with a status report on the implementation of the Environmental Justice Policies and Actions (Policies).

Since the last update to the Board in January 2003, the ARB staff has moved forward with the implementation of the Policies. This status report provided an overview of the broad spectrum of environmental justice activities being conducted at the Air Resources Board. Environmental justice activities over the last few years have included public outreach, adoption of new regulations to reduce public exposure to toxic air pollutants, strengthening enforcement, development of techniques to assess cumulative air pollution impacts, and research. The priority for this

year is to continue our mission of protecting public health by reducing air pollution exposure in all communities through regulatory activities, incentive programs, and research. Based on oral testimony and comments from the Board, ARB staff will be arranging a study session to discuss land use issues and continue the development of the Air Quality and Land Use Handbook. Representatives of environmental, community, and industry groups, local planning agencies, air districts, academicians, and other interested state agencies will be invited to participate. These actions will continue our commitment to the implementation of ARB's Environmental Justice Policies and Actions.

ORAL TESTIMONY:

Diane Bailey, National Resources Defense
Jane Williams, California Communities Against Toxics
Joe Lyou, California Environmental Rights Alliance
Cindy Tuck, California Council for Environmental
and Economic Balance

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: No