

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
November 20, 2003

California Environmental Protection Agency
Air Resources Board
Central Valley Auditorium, Second Floor
1001 I Street
Sacramento, California

MEMBERS PRESENT: Hons. Alan C. Lloyd, Ph.D., Chairman
Joseph C. Calhoun, P.E.
Doreen D'Adamo
Mark DeSaulnier
C. Hugh Friedman
Matthew R. McKinnon
Barbara Patrick
Barbara Riordan

AGENDA ITEM #

03-9-1 **Public Meeting to Consider a Health Update**

SUMMARY OF AGENDA ITEM:

As part of the regular staff updates on health-related research findings, staff presented a summary of the recently completed study of children's exposures due to school bus commutes. This study found that exhaust from uncontrolled diesel school buses contributed significantly to their own on-board pollutant levels. Readings of diesel-related pollutants (DRP) on these buses were significantly higher on average than roadway concentrations. This "self-pollution" effect was more pronounced for older buses and higher when windows were closed. In contrast, pollutant levels were significantly lower on a diesel bus with a particle trap and a bus powered by compressed natural gas, highlighting the importance of lower bus emissions in reducing on-board exposures.

The other major contributor to high on-board concentrations was the surrounding traffic, with DRP concentrations several times higher on congested urban routes as compared with a lightly congested rural/suburban route to the west of urban Los Angeles.

Risk calculations were presented that showed the increased cancer risk due to long commutes by diesel bus were important, but did not justify the increased risk of accident fatalities that would be caused moving children to other forms of transportation.

Recommendations presented included replacing older buses, retrofitting medium-age buses with particulate traps, and using natural gas fueled buses to reduce on-board concentrations. Bus activity-related recommendations included using newer buses for the longer routes, keeping windows open for older buses, and avoiding bus caravanning.

Finally, staff discussed a proposal to conduct a follow-up study to further investigate the self-pollution problem and mitigation methods. The Board asked staff to develop an outreach program to distribute the study results and recommendations to the State's school districts.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None

03-9-2 Public Meeting to Consider Adopting the Diesel Particulate Matter Control Measure for Stationary Compression-Ignition Engines

SUMMARY OF AGENDA ITEM:

Staff presented the Proposed Airborne Toxic Control Measure for Stationary Compression Ignition Engines. This measure is designed to reduce the public's exposure to diesel particulate matter (PM) and is one of several measures being developed to achieve the goals of the Diesel Risk Reduction Plan. This measure also achieves reductions in ozone precursors, such as oxides of nitrogen (NOx) and reactive organic gases (ROG), to support the goals of the State Implementation Plan (SIP) for ozone.

The measure was developed through extensive consultations with industry, government agency representatives, environmental organizations, and members of the public. The measure requires stationary diesel engine sellers, owners and operators to reduce diesel PM emissions. This will be achieved through the use of clean fuel, engines that meet low emission standards, and

operational practices. The measure offers various options for stationary diesel engine owners to meet compliance requirements.

The cost-effectiveness of the proposed rule is about \$15 per pound of diesel PM reduced, considering only the benefits of reducing diesel PM. Because the proposed ATCM will also reduce ROG and NOx emissions, ARB staff also allocated half of the cost of compliance against these benefits, resulting in cost effectiveness values of about \$8/lb of diesel PM and \$1/lb of ROG plus NOx reduced.

As a result of comments received, the staff presented several modifications to the original proposal released on October 26, 2003. The modifications were comprised of the following:

- Additional language that would allow emergency standby engines to be used in two specific types of demand response programs – interruptible service contracts and the San Diego Gas and Electric Companies Rolling Blackout Reduction Program - provided engines are only dispatched when blackouts are imminent or already occurring.
- Clarifications to definitions, exemption language, and non-substantive corrections to the original text of the measure.

ORAL TESTIMONY

Barbara Lee - California Air Pollution Control Officers Association
Elaine Chang - South Coast Air Quality Management Association
Bruce Bertelsen - Manufacturers of Emissions Controls Association
Tim French - Engine manufacturers Association
Daniel McGivney - Western Municipal Water District
Kate Larsen - Environmental Defense
Bonnie Holmes-Gen - American Lung Association
John Mundy - Las Virgenes Municipal Water District
Mike Dillon - California Ski Industry Association
Carolyn Green - City of Thousand Oaks
Carol Kaufman - Metropolitan Water District of Southern California
Mary Jane Foley - Southern California Alliance of Publicly Owned Treatment Works
Dan Smith - Association of California Water Agencies

FORMAL BOARD ACTION

Per the direction of Executive Order S-2-03, the Board took no formal action on Resolution 03-9-2 and the comment period for the measure was not closed. Executive Order S-2-03 directs all State agencies to pause in their processing of regulatory items, so that

proposed measures and adopted regulations can be reviewed for their impacts on businesses. The Board did not set a date on which the Board will take formal action on this measure.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

03-9-3 Public Meeting to Consider the Draft Report, "Planned Air Pollution Research, Fiscal Year 2003-2004"

SUMMARY OF AGENDA ITEM:

Staff presented the draft report entitled, "Planned Air Pollution Research, Fiscal Year 2003-2004," which contained 19 research projects. The report describes projected funding allocations and proposed research projects; some recommended for funding and others recommended if funding becomes available.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: Approved Resolution No. 03-29

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: Yes

03-9-4 Public Meeting to Update the Board on Progress Made in the Development of Regulations to Reduce Climate Change Emissions from Motor Vehicles

SUMMARY OF AGENDA ITEM:

AB 1493, Pavley 2002, directs the Air Resources Board (ARB) to develop regulations to reduce climate change emissions from motor vehicles. This directive is the outgrowth of increasing concern regarding the effects of climate change on public health, the environment, and the economy. Such effects include increasing temperatures that adversely affect California's public health through changes in air quality, the number of weather-related deaths, and a possible increase in infectious diseases. Another area of considerable concern is the effect of climate change on California's water supply. Altered temperatures and rainfall patterns, and new pest problems that could result from climate change could wreak havoc on our agricultural industry. The final consequence highlighted here, although this list is by no means exhaustive, is the susceptibility of this State's spectacular

coastal and forest areas to the adverse consequences of climate change as sea level rises and fire hazards increase.

ARB staff outlined its assessment of various ways in which the emission standards can be expressed, and their implications. ARB staff is still in the process of evaluating the pros and cons of the possible approaches.

Regardless of the approach used, the standards will be based on a thorough evaluation of technologies that could be used to reduce climate change emissions from vehicles. This includes on-vehicle improvements to the engine, transmission, catalytic converter(s), and air conditioning system. Staff discussed ongoing technology improvements that can reduce climate change emissions from vehicles without affecting their performance or other desirable attributes. Each manufacturer will have the ability to choose the technology or mix of technologies best suited to its specific needs. To provide flexibility in meeting the standards, ARB staff will be proposing to allow banking and trading, credit for early compliance and alternative compliance strategies in so far as they do not reduce the effectiveness of the regulations.

Climate change emissions being considered for the purposes of this work are carbon dioxide, hydrofluorocarbons, methane, and nitrous oxide. As these pollutants differ in terms of their impact on climate, emission benefits from the regulations would be determined on a CO₂-equivalent basis.

In order to provide a more complete understanding of the emission benefits of the regulations to be proposed in September 2004, staff is evaluating the potential impact of changes in consumer behavior brought about by the regulations. It is likely that regulated vehicles will be priced higher than vehicles today, and it is also likely that regulated vehicles will be less expensive to operate. Consumers may respond to higher prices by purchasing fewer new vehicles (referred to as the fleet turnover effect), and may respond to lower operating costs by driving more (referred to as the rebound effect). ARB staff updated the Board on our efforts to evaluate the impact of the fleet turnover and rebound effects on emissions.

Finally, there are legal issues associated with ARB actions to regulate climate change emissions. Auto manufacturers have suggested that implementation of AB 1493 may be preempted by federal law. ARB staff is aware of the manufacturers' concerns and is working to ensure that the regulations, once adopted, are with the authority conferred by State and federal law.

ORAL TESTIMONY:

Mr. Russell Long, Bluewater Network

Dr. Henry Clark, West County Toxics Coalition

Ms. Jane Williams, California Communities Against Toxics

FORMAL BOARD ACTION:

None. This item was informational only.

RESPONSIBLE DIVISION:

Executive Office and Mobile Source Control Division

STAFF REPORT:

None