

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
June 24, 2004

Air Resources Board
Auditorium
9530 Telstar Ave.
El Monte, California 91731

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

AGENDA ITEM #

04-6-4: Health Update – Final Report on the Children’s Health Study

SUMMARY OF AGENDA ITEM:

Concern over air pollution’s effect on children’s health and on the adverse effects of long-term exposure led the Air Resources Board (ARB) to fund the Children’s Health Study (CHS) in 1993. The CHS measured health effects for nearly 6000 children living in 12 southern California communities with varying ambient air pollution levels. The CHS investigators recently provided the ARB with a final report that synthesizes the results from over a decade of research and 72 peer-reviewed publications from the study. The results indicate that the mix of air pollutants found in southern California, including PM10 (particulate matter with aerodynamic diameter less than 10 microns), PM2.5, nitrogen dioxide, ozone, and acid vapor, are associated with deficits in lung function growth, and increases in bronchitis symptoms in children with asthma. The investigators also found that lung function growth changed if the children in the study relocated to areas with different PM levels. If children moved from a community with high PM to an area with low PM, their lung function growth increased, although this increase may not make up for the adverse effects of their previous

exposures. Exposure to higher levels of ozone, especially by those children most physically active, was found to be significantly associated with new cases of asthma. Ozone exposure was also associated with a substantial increase in school absenteeism from both upper and lower respiratory illnesses.

The investigative team at the University of Southern California received a grant from the National Institute of Environmental Health Sciences to continue to build upon the extensive amount of information that has already been gained regarding the long-term health effects of air pollution on children. One of the questions to be answered is if the lung function deficits seen in the children continue into adulthood. The ARB will continue to work in collaboration with the CHS investigators through the loan of monitoring equipment and by setting up a process whereby the health and exposure data from the ARB-funded study can be released to qualified investigators in order to expand upon our understanding of the relationship between air pollution and children's health.

Dr. Friedman praised the CHS, calling it a milestone study and one of the most important epidemiologic studies of children's health ever performed. He noted that, although it was expensive, it was very well worth the cost because of its conclusion that air pollutants, in concentrations typically found in southern California, have deleterious, long-term effects on children's lung function. Chairman Lloyd noted the financial contributions from several co-funders.

ORAL TESTIMONY: None.

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

04-6-4: Public Hearing to Consider the Adoption of Proposed Modifications to the Exhaust Emission Standard and Test Procedures – 1985 and Subsequent Model Year Heavy- Duty Urban Bus Engine and Vehicles; The Fleet Rule for Transit Agencies; and Zero-Emission Bus Requirements

SUMMARY OF AGENDA ITEM:

The proposed amendments accomplish two objectives: to provide a mechanism for some transit agencies to purchase diesel hybrid electric buses (HEB), and to align the zero-emission bus (ZEB) demonstration project required of large transit agencies on the diesel path with the current state of technology.

Staff proposed that transit agencies on the diesel path be allowed to purchase diesel HEB certified at 1.8 grams per brake horsepower –hour (g/bhp-hr) oxides of nitrogen (NO_x) and 0.01 g/bhp-hr particulate matter (PM). In order to offset excess NO_x emissions due to the higher engine emission standard of diesel HEB, staff proposed that a transit agency demonstrate NO_x emission offsets equaling the difference of the diesel HEB certified at 1.8 g/bhp-hr and the 2004 diesel urban bus emission standard of 0.5 g/bhp-hr. The transit agency will be required to submit a plan and obtain the Executive Officer's approval. The proposal should encourage manufacturers to certify and produce diesel HEB for sale in California. The amendments will achieve a small emission benefit, through increased turnover of older diesel buses, equal to 0.3 tons per day of NO_x and 10 pounds per day of PM reduction in 2006. Staff assumes that 150 diesel HEB will be purchased, replacing 150 of the oldest diesel buses.

The ZEB demonstration project is up to 32 months behind schedule because of factors relating to the technology of fuel cell buses. Staff proposed to extend the timelines and reduce the number of buses required for the ZEB demonstration project to match the original cost estimates and align the schedule with the availability of the technology. The benefit intended to accrue from the projects is advancement of the technology and this objective will be met with the amendments.

Estimated costs to transportation planning agencies, commissions, and transit agencies would remain the same as those estimated in the February 2000 rulemaking. The cost-effectiveness of that rule was estimated to be \$1.80 per pound of NO_x in 2010 and \$1.50 in 2020. Since no transit agency is required to purchase a diesel HEB, no additional cost is imposed on any public agency.

ORAL TESTIMONY:

Joshua Shaw, California Transit Association
Jose Cisneros, San Francisco MUNI
Gene Walker, Golden Gate Bridge Highway & Transportation
District/ California Transit Association
David Olmeda, San Mateo County Transit District
Robert Babik, General Motors Corporation
Thomas Webb, BAE Systems
Douglas Quetin, California Air Pollution Control Officers Association
Barry Wallerstein, South Coast Air Quality Management District
Michael Eaves, California Natural Gas Vehicle Coalition
Julie Masters, National Resources Defense Council
Michael Simon, ISE Corporation
Dawn Friest, Engine Manufacturers Association
Nidia Bautvista, Coalition for Clean Air
Marty Mellerer, San Francisco MUNI

FORMAL BOARD ACTION:

There were no changes to staff's proposal and the Board approved Resolution 04-19 unanimously.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

04-6-5: Public Hearing to Consider the Adoption of Proposed Amendments to the California Consumer Products Regulations and Method 310; and Adoption of a Proposed Airborne Toxic Control Measure for Para-Dichlorobenzene

SUMMARY OF AGENDA ITEM:

Staff presented the proposed amendments to the California Consumer Products Regulations and Method 310, and the proposed airborne toxic control measure (ATCM) for para-dichlorobenzene. The proposed amendments and ATCM are designed to meet the commitments in the 2003 State and Federal Strategy for the California State Implementation Plan (SIP) and to fulfill the requirements of a lawsuit settlement agreement with environmental groups regarding Air Resources Board's (ARB or Board) progress under the 1994 SIP. The proposed amendments are also designed to fulfill requirements under Health and Safety

Code section 41712 to achieve the maximum feasible reduction in volatile organic compound (VOC) emissions from consumer products. The proposed amendments to the Consumer Products Regulations set new VOC limits for 15 categories of products and the proposed ATCM will prohibit the use of para-dichlorobenzene in toilet/urinal care products and solid air fresheners.

The measures were developed through workshops and meetings with environmental organizations, industry, government agencies, and other parties interested in the regulation of consumer products and the use of para-dichlorobenzene in toilet/urinal care products and solid air fresheners.

The measures require manufacturers and marketers of certain consumer products to reduce the product VOC content to comply with new VOC limits. The amendments include various other modifications and clarifications to the regulations and to Method 310, used to determine VOC content. Three toxic air contaminants -- methylene chloride, perchloroethylene, and trichloroethylene -- will be prohibited in seven product categories. Para-dichloroethylene will be prohibited in toilet/urinal care products and solid air fresheners.

The average cost-effectiveness of the staff proposal was estimated to be about \$2.40 per pound of VOC reduced. The cost of production to comply with the proposal, when converted to a per unit cost is estimated to be about \$0.16 per individual consumer product.

As a result of comments received, the staff presented several modifications to the original proposal released on May 7, 2004. The modifications include the following:

- ? To provide adequate lead-time, a modification to the sell-through notification provision to take effect on products manufactured on or after December 31, 2004.
- ? A modification to the date coding requirements to clarify how they apply to multi-unit packaging. This modification should provide manufacturers with flexibility for multi-unit packages.
- ? Modifications to clarify how the most restrictive limit applies to insecticides. These include a modification to exclude insecticide foggers from the most restrictive limit provision. Another modification will allow Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

registered insecticide products an extra year to comply with the change to the most restrictive limit provision.

- ? Modification to the most restrictive limit provision to clarify that when a product falls into two or more category definitions the most restrictive limit applies, even if the definitions may exclude one another.
- ? In response to comments, a modification to move the effective date of the phase out on the use of the three chlorinated toxic air contaminants for the seven affected product categories from December 31, 2006 to December 31, 2005. Staff will continue to work with interested parties to determine if this earlier effective date is appropriate for some or all of the categories, prior to releasing the 15-day changes.
- ? In response to comments, a modification to move the effective date on the prohibition of the use of para-dichlorobenzene in solid air fresheners and toilet/urinal care products from December 31, 2006 to December 31, 2005. The sell-through period will be changed to end on December 31, 2006.
- ? Several minor modifications, such as renumbering subsections and correcting dates.

ORAL TESTIMONY:

Warren Huang, Los Angeles Department of Public Works
R. Bruce Dickson, Chlorobenzene Producers Association
Byron Butterworth, Butterworth Consulting, representing,
Chlorobenzene Producers Association
Ann Heil, Tri-TAC
Joseph Yost, Consumer Specialty Products Association
Melissa Lin Perella, NRDC
Nida Bautista, Coalition for Clean Air
Thomas Donegan, Cosmetic, Toiletry, and Fragrance Association
Richard Pearl, Magic American
Jim Mattesich, Representing Reckitt Benckiser
Katy Wolf, Institute Research and Technical Assistance
Doug Raymond, Sherwin Williams

FORMAL BOARD ACTION:

The Board approved Resolution 04-18 to adopt the proposed amendments and the proposed ATCM with modifications to the original proposal as suggested by staff. The Board directed staff to evaluate the modifications and to make information available to the public for a 15-day comment period. The Board also directed staff to perform a detailed technical and cost assessment of progress toward meeting the second tier Shaving Gel VOC limit.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes