

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
October 19, 2006

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

MEMBERS PRESENT: Dr. Robert Sawyer
 Ms. Sandra Berg
 Doreen D'Adamo
 Supervisor Mark DeSaulnier
 Lydia Kennard
 Mayor Loveridge
 Ms. Barbara Riordan

Agenda Item #

06-9-1: Report to the Board on a Health Update: Air Pollution and Infant Mortality in California

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 discussed what we currently know about the association between particulate air pollution and premature infant mortality. Staff presented two new California based studies that provide further evidence of a particulate matter air pollution effect on infant mortality. Woodruff et al. found that the strongest association with particulate pollution in this study was respiratory-related post neonatal infant death. Researchers found a 213% increased risk for respiratory-related infant death associated to a 10 ug/m³ increase in lifetime PM_{2.5} exposure, although, the confidence intervals observed were large. The investigators also found a 7% increased risk for all-cause death, however the lower end of the range was not statistically significant, and found no significant findings for SIDS. Ritz et al. found that exposure to PM₁₀ air pollution was associated with all-cause infant death, respiratory-related infant death and sudden infant death syndrome, or SIDS. For preterm birth infants or low birth weight infants, the investigators found a 6% increased risk in all-cause deaths and a 26% increased risk in SIDS associated with a 10 ug/m³ increase of

PM10 exposure averaged over two-months prior to death. On a shorter window of exposure and for all infants regardless of birth weight, the investigators found a 5% increased risk in respiratory-related death due to PM10 exposures averaged over the two weeks prior to death.

Staff concluded that both of these studies indicate that particulate air pollution may influence an infant's chance of survival. In addition, both of these studies corroborate previous findings on PM air pollution effects on infant death and add further evidence of an effect from exposures in California. These studies support the observations that not only adults but especially children and infants benefit from PM controls and air quality improvements. Staff ended by determining that more studies are needed to fill the gap of knowledge for remaining unanswered questions between exposure to PM and children and infants vulnerability to air pollution.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

06-9-2: Report to the Board on Air Resources Board's Climate Change Actions

SUMMARY OF AGENDA ITEM:

Chapter 488, Statutes of 2006 (AB 32, Pavley) establishes a first-in-the-world comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, cost-effective reductions of greenhouse gases (GHG). The bill makes ARB responsible for monitoring and reducing GHG emissions, continues the existing Climate Action Team to coordinate statewide efforts, and authorizes the Governor to invoke a safety valve in the event of extraordinary circumstances, catastrophic events or the threat of significant economic harm, for up to twelve months at a time.

AB 32 requires the ARB to:

- Establish by January 1, 2008 a statewide GHG emissions cap for 2020, based on 1990 emissions.
- Adopt by January 1, 2008 mandatory reporting rules for significant sources of greenhouse gases.
- Adopt a plan by January 1, 2009 indicating how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions.
- Adopt regulations by January 1, 2011 to achieve the maximum technologically feasible and cost-effective reductions in GHGs, including provisions for using both market mechanisms and alternative compliance mechanisms.
- Convene an Environmental Justice Advisory Committee and an Economic and Technology Advancement Advisory Committee to advise ARB.
- Ensure public notice and opportunity for comment for all ARB actions.
- Evaluate several factors prior to imposing any mandates or authorizing market mechanisms, including impacts on California's economy, the environment, and public health; equity among regulated entities; electricity reliability, conformance with other environmental laws, and the potential for disproportionate localized impacts on low-income communities.
- Publish by June 30, 2007 a list of discrete early action measures that can be implemented before January 1, 2010, and subsequently adopt such measures.

Staff will advise the Board regarding the process by which the various items will be developed and brought to the Board, the timeline and major milestones, and significant issues to be addressed.

ORAL TESTIMONY: Russ George, PLANKTOS, Inc.

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Executive Office

STAFF REPORT: No

06-9-3: Public Meeting to Update the Board on the Air Resources Board's 2006 Legislative Office Report

SUMMARY OF AGENDA ITEM:

Legislative Director Rob Oglesby provided a brief review of major air quality related developments in the California Legislature for the second year of the 2005-2006 Legislative Session.

Of more than 2,000 bills introduced during this Legislative year, about 200 were tracked by ARB's legislative staff relating to air quality in the Legislature. Of these, only 50 bills were sent to the Governor (37 signed into law and 13 were vetoed). Legislative office staff discussed significant legislation passed this year including a bond measure that is on the November 7, 2006 ballot. Staff also highlighted key issue areas addressed by a number of bills including Greenhouse Gases, Energy, Goods Movement, Smog Check, School Bus Clean-Up, and Alternative Fuels.

In addition to action on specific bills, the Legislature held twenty special hearings related to air pollution issues. Particular attention was devoted to transportation, infrastructure, and alternative fuels. And the Senate confirmed the Governor's appointment of a key member of ARB's governing Board.

ORAL TESTIMONY: None.

FORMAL BOARD ACTION: None (Informational Item).

RESPONSIBLE DIVISION: Legislative Office

STAFF REPORT: Yes.

06-9-4: Public Hearing to Consider Proposed Amendments to the Zero Emission Bus Regulation

SUMMARY OF AGENDA ITEM:

In February 2000, the Board established a new fleet rule for transit agencies with more stringent emission standards for new urban bus engines and vehicles. Under the fleet rule, each transit agency was required to select a compliance path – either the “diesel” path or the “alternative fuel” path. The regulation also included requirements regarding Zero Emission Buses (ZBuses), with the goal of developing zero emission transit fleets. Zero emission technologies include battery electric buses, electric trolley buses with overhead

twin wire, and hydrogen fueled fuel cell buses. The ZBus regulation consists of two primary elements for large transit agencies – a requirement that diesel path agencies initiate a ZBus Demonstration Project and a requirement that a minimum percentage of buses purchased or leased be ZBuses starting in the 2008 model year for diesel path transit agencies and starting in the 2010 model year for alternative fuel path transit agencies. The regulation applies to transit agencies that operate 200 or more urban buses.

Success of the initial fuel cell bus demonstration projects was mixed. In June 2004, staff brought amendments to the ZBus requirement to the Board. The Board revised the zero emission bus demonstration program by reducing the number of concurrent fuel cell buses and extending the time period for initiation and completion of the demonstration projects. Despite the continued efforts of the technology providers and transit agencies, ZBus technology has not developed as rapidly as initially projected and staff proposed additional amendments.

In developing the proposed amendments, ARB staff made extensive personal contacts with industry and facility representatives as well as other affected parties through meetings, telephone calls, and electronic list-serves. These activities included holding four public workshops, attending 28 industry meetings and conducting more than 30 telephone conversations with working groups, transit agencies, affected manufacturers and other interested stakeholders.

SUMMARY AND IMPACTS:

ARB staff recommended that the Board adopt proposed amendments to sections 2023.1, 2023.3 and 2023.4, title 13, California Code of Regulations, set forth in the proposed Regulation Order in Appendix A of the Initial Statement of Reasons along with additional changes as proposed at the hearing.

Staff proposed the start of the purchase requirement be postponed by three years for transit agencies on the diesel path, and one or two years for transit agencies on the alternative fuel path depending on participation in a ZBus demonstration. Since the purchase requirement needed to be delayed, staff proposed that the purchase requirement be extended through model year 2026 for transit agencies in either fuel path. The Board accepted staff's recommendation for diesel path agencies and started the purchase requirement in 2011. However, the Board directed staff to delay

the purchase requirement for alternative fuel transit agencies until model year 2012.

In addition, staff proposed an advanced demonstration, to help offset emissions lost from the delay in the purchase requirement and to provide manufacturers an opportunity to prove technology advancement and cost reduction claims. The advanced demonstration is required for all diesel path transit agencies and is optional for alternative fuel path transit agencies. Diesel path transit agencies must have buses in revenue service by January 1, 2009.

Transit agencies can choose to participate on their own or join in a multi-transit agency demonstration. Single transit agencies are required to purchase six zero emission buses, while multi transit agency demonstrations are required to contribute three new zero emission buses per transit agency with a minimum of twelve zero emission buses overall.

A technology evaluation will be brought back to the Board no later than July 2009. In this evaluation staff will assess the purchase cost, the fuel cell durability or warranty, and reliability. At the Board's direction, staff modified the original proposal to shift the performance guidelines from the regulation to the Board hearing resolution. Transit agencies conducting initial demonstrations may use their initial demonstration zero emission buses to count towards the advanced demonstration requirements provided the buses are upgraded to new zero emission bus technology.

Additional modifications included:

- Clarifying the reporting requirements.
- Including modifications that cross reference appropriate regulatory sections.
- Adjusting the early implementation credits to align with the new purchase requirement dates.

The Executive Officer has determined that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons. Any business involved in the production or use of zero emission buses potentially would be indirectly affected by the proposed amendments. Those potentially affected are manufacturers that supply components for fuel cells,

batteries, integration systems, chassis, and distributors and retailers that sell such equipment. Most of these manufacturers are located outside of California.

ORAL TESTIMONY:

Michael Murphy, Bay Area Air Quality Management District
Arthur Douwes, Santa Clara Valley Transportation Authority
Durand Rall, OmniTrans
George Karbowski, Foothill Transit
Gene Walker, Golden Gate Transit
David Fienberg, City of Santa Monica's Big Blue Bus
Dana Lee, Long Beach Transit
Steven Miller, Golden Gate Transit
Mary King, Alameda-Contra Costa Transit
Bonnie Holmes-Gen, American Lung Association
Richard Hunt, Los Angeles Metropolitan Transportation Authority
Therese McMillan, Metropolitan Transportation Commission
Adi Arieli, Arieli Associates
Todd Campbell, Clean Energy
Tina Andolina, Coalition for Clean Air
Jason Mark, Union of Concerned Scientists
Roger Marmaro, Hythane Company
Mike Eaves, California Natural Gas Vehicle Coalition
Michael Tosca, United Technologies Company
Josh Shaw, California Transit Association

FORMAL BOARD ACTION:

The Board approved Resolution 06-9-4, which approved the staff's proposal and proposed modifications along with additional Board modifications, by a unanimous vote. All modifications will be made available to the public for review and comment for 15 days in a Notice of Public Availability of Modified Text. The Executive Officer will consider any comments received during this period prior to finalizing the regulation.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

06-9-5:

Public Hearing to Consider Amendments to the Distributed Generation Certification Program

SUMMARY OF AGENDA ITEM:

Staff presented the proposed amendments to the Distributed Generation Certification Regulation. The proposed amendments were designed to address the 2005 technical review, incorporate waste-gas fueled technologies, and improve clarity and enforceability of the regulation.

The technology review addressed the feasibility of the 2007 standards, the credit given for utilizing combined heat and power (CHP) to meet these standards, emissions durability, and test methods and procedures. ARB staff also evaluated other additions and changes to the regulation during the review.

Staff believes the 2007 limits are feasible and did not propose any changes to the January 1, 2007, compliance date. Staff proposed no changes to the CHP credit. Based on the technology review, staff proposed changes to the emissions durability requirement and the testing procedures.

Staff proposed amendments to add emission standards for waste-gas fueled technologies (e.g. landfill, digester, and oil-field waste gases) to be certified under this program.

Staff proposed increasing the certification fee from \$2,500 to \$7,500 for new applications.

ORAL TESTIMONY:

The Board heard testimony from one witness, who took a neutral position to the amendments.

Ruth MacDougall, Sacramento Municipal Utility District (SMUD), requested that the Distributed Generation Guidelines be made consistent with the Distributed Generation Certification Regulation.

FORMAL BOARD ACTION: The Board approved Resolution 06-29, by a unanimous vote.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

06-9-6:

Public Meeting to Update the Board on Allocation of \$25 Million for Alternative Fuel Incentives

SUMMARY OF AGENDA ITEM:

Pursuant to the 2006 Budget Act (Assembly Bill (AB) 1811), ARB is required to develop a joint plan with the California Energy Commission (CEC) to spend \$25 million to assist in the development of specific measures to reduce air pollution and greenhouse gas emissions through alternative fuel incentives. AB 1811 requires the funds to be encumbered by June 30, 2007 and fully expended by June 30, 2009.

There are a number of recent State policy directives that call for substantial expansion of the use and production of alternative fuels made from biomass and to reduce dependence on petroleum-based fuels. These include Executive Order S-06-06 – Governor’s Executive Order on biofuels, the Bioenergy Action Plan for California, and the Climate Action Plan. Staff designed the Alternative Fuels Incentives program to be consistent with the state policies on alternative fuels and the AB 1811 provisions.

ARB and CEC staff briefed the Board on the proposed spending allocations, including incentivizing the increased use of alternative fuels and vehicles and production of biofuels. The program would also seek to incentivize alternative vehicle technologies such as electric and plug-in hybrids, zero emission and enabling transit buses, and alternative fuel advanced technology and zero emission vehicles. Staff also proposed the funding of alternative fuel and vehicle emission and performance testing, and a consumer education and outreach program. Staff proposes to issue project criteria and solicitations in January 2007, and to make recommendations and brief the Board on project awards in Spring of 2007.

Three stakeholders provided comments to the Board, which were in support of the staff’s proposed concepts for program implementation.

ORAL TESTIMONY:

Todd Campbell, Clean Energy
Mike Eaves, California NGV Coalition
Bill Van Amburg, WestStart-CALSTART

FORMAL BOARD ACTION: None, Informational Only.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: None.