# State of California AIR RESOURCES BOARD

Summary of Board Meeting April 26, 2007

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

**MEMBERS PRESENT:** Robert F. Sawyer, Ph.D., Chairman

Sandra Berg Dorene D'Adamo Henry Gong, Jr., M.D.

Jerry Hill

Ronald O. Loveridge Barbara Riordan Ronald Roberts Daniel Sperling

# Agenda Item #

07-4-1: Report to the Board on a Health Update: Health Impacts of Fine Particle Components in California

#### SUMMARY OF AGENDA ITEM:

The ARB staff provides the Board with regular updates on recent research findings on the health effects of air pollution. This month, staff presented the findings of a study completed by the Office of Environmental Health Hazard Assessment and their collaborators on the health effects of fine particulate matter. Since the Board voted to strengthen the state ambient air quality standard for PM2.5 in 2002, several studies have supported the concerns about public exposure to this pollutant. However, PM2.5 is composed of many different substances, which may not be equal in their health impacts. This study investigated the effects of the components of PM2.5 on mortality in several California counties.

Staff reported that particulate matter is clearly and consistently associated with adverse health impacts. Epidemiological findings show strong associations between exposure to particles and increased respiratory illness and mortality in people with preexisting respiratory illness. Staff reported on the results of a recent

study in California examining the associations between daily mortality and nineteen fine particulate matter components, including elemental and organic carbon, nitrates, sulfates, and various metals. Staff reported that examining the toxicity of components of PM may be relevant and significant for both the establishment of ambient air quality standards and for more targeted PM control strategies. The findings of the study indicated that risk for premature death may vary with exposure to the PM2.5 constituents. Specifically, the results support the hypothesis that pollution from motor vehicles and other sources of combustion, including residential wood burning, may be of particular concern in California.

Board Member Dr. Henry Gong congratulated Dr. Alvarado on the presentation of the research. He pointed out that there are some biological or toxicological data that support the health findings in epidemiological studies. He also pointed out that we are exposed to mixtures, not just one compound. Further, Dr. Gong found it interesting that the investigators were able to see health impacts from large populations. He stated that the findings gave him more confidence about the information we have about the health effects of combustion-related particles.

#### **ORAL TESTIMONY:**

Doug Korthof (general public) submitted comments suggesting that the study from the health update validated what we already know, and suggested that the ARB study the issue less and take more action to reduce PM exposures.

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

# 07-4-2: Public Meeting to Consider Research Proposals

## SUMMARY OF AGENDA ITEM:

Staff described the objective and expected results for the following three research proposals.

1. "Evaluation of the Potential Impact of Emissions of HFC-134a from Non-Professional Servicing of Motor Vehicle Air Conditioning Systems" ARMINES, \$130,000.

- 2. "Perform the Heavy-Duty A/C Refrigerant Inventory," Eastern Research Group, \$150,000.
- 3. "Improvements to Versatile Aerosol Concentration Enrichment System (amendment to 04-332)" University of California, Davis, \$29,109.

#### **ORAL TESTIMONY:**

Francois Choquette
Doug Korthof, Private Citizen

#### FORMAL BOARD ACTION:

The Board approved resolution numbers 07-11 through 07-12 and 07-13 unanimously.

RESPONSIBLE DIVISION: Research Division

# 07-4-6: Report to the Board on the 2007/2008 State Implementation Plan

#### SUMMARY OF AGENDA ITEM:

Federal clean air laws require areas with unhealthy levels of ozone and fine particulate matter (PM2.5) to develop plans, known as State Implementation Plans (SIPs), describing how they will attain national ambient air quality standards. Plans for the 8-hour ozone standard and the PM2.5 standard are due to the U.S. Environmental Protection Agency in June 2007 and April 2008 respectively.

ARB staff briefed the Board on the development of the State Implementation Plan (SIP). The SIP is a comprehensive strategy that lays out the pathway to achieve federal air quality standards as quickly as possible through a combination of technologically feasible, cost effective, and far reaching measures. The presentation included a brief discussion about the status of each nonattainment area and highlighted possible solutions to the PM2.5 attainment challenges in the South Coast Air Basin.

# **ORAL TESTIMONY:**

Doug Korthof, Private Citizen
Tim Carmichael, Coalition for Clean Air

Jerald Cole, Hydrogen Ventures LLC

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Planning and Technical Support

STAFF REPORT: No

07-4-3: Public Hearing to Consider the Proposed Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products (Composite Wood ATCM).

## **SUMMARY OF AGENDA ITEM:**

Staff proposed the Composite Wood ATCM to reduce formaldehyde emissions from three major composite wood products. The control measure applies to hardwood plywood, particleboard, and medium density fiberboard panels and finished goods containing those materials that would be sold, supplied, used, or manufactured for sale in California.

Formaldehyde emissions from hardwood plywood, particleboard, and medium density fiberboard will be reduced in two phases of increasingly stringent standards. Phase 1, beginning in 2009, would cap emissions at 0.08 ppm for hardwood plywood, 0.18 ppm for particleboard, and 0.21 ppm for medium density fiberboard. Phase 2, beginning in 2010 for hardwood plywood and 2011 for particleboard and medium density fiberboard, would cap emissions at 0.05 ppm, 0.09 ppm, and 0.11 ppm, respectively. In addition, the emission cap includes a separate Phase 2 standard of 0.13 ppm for medium density fiberboard with a maximum thickness of 8 millimeters. "Sell-through" provisions allow for affected parties to sell off their inventories prior to the emission cap effective dates to provide a smooth transition. Specific exemptions were provided for products not offered for sale in California, products subject to federal regulations, military specification plywood, and other specified items. An enforcement program will be established based on third party certification of manufactured hardwood plywood, particle board and, medium density fiberboard, requirements for statements of compliance, recordkeeping, product labeling, and facility inspections.

In Phase 2, the ATCM would reduce statewide emissions of formaldehyde from hardwood plywood, particleboard, and medium density fiberboard by 500 tons per year, human exposure to

formaldehyde by 40 percent, and reduce lifetime excess cancer cases per million people exposed by 35 to 97 cases.

Public testimony was divided among opponents and proponents of the approved ATCM. Most of the composite wood industry expressed concerns that the Phase 2 standards were too stringent and too costly to implement. However, other industry representatives urged the Board to adopt stricter standards at an accelerated timeline. Likewise, health advocates and green building representatives also urged the Board to adopt more aggressive standards and to accelerate the implementation schedule as well.

#### **ORAL TESTIMONY:**

Tim Carmichael, Coalition for Clean Air & American Lung Assn.

Mike Robson, Assn. of Woodworking & Furnishing Suppliers

Betsy Natz, Formaldehyde Council, Inc.

Gary Marsh, University of Pittsburgh

Jay Murray, Murray and Associates

Lee Schull, Composite Panel Assn. (CPA) & California Wood

Industries Coalition (CWIC)

Wade Gregory, SierraPine

Tom Julia, CPA

Will Warberg, Plum Creek MDF

Darrell Keeling, Roseburg Forest Products

Bill Altman, Hardwood Plywood & Veneer Assn. (HPVA)

Charlie Compton, Hambro Forest Products

Bill Perdue, American Home Furnishings Alliance

Edward Elias, APA - The Engineered Wood Assn.

Mike Zimmerman, Sauder Woodworking

Richard Titus, Kitchen Cabinet Manufacturers Assn.

Bob Raymer, California Building Industry Assn.

Brock Landry, CPA & CWIC

Gene Livingston, CWIC

Pablo Dopico, Georgia-Pacific Corporation

Mark Kable, Setzer Forest Products

Suzanne Morgan, International Wood Products Assn.

John Chaffin, John Chaffin & Associates

Kelly Schroeder, Wood Moulding & Millwork Products Assn.

John Morrison, Sunset Moulding Company

Scott Watson, IPMG

David Harmon, Hexion Specialty Chemicals, Inc.

Doug Korthof, Citizen

Harry Demorest, Columbia Forest Products (CFP)

Ed Woods, CFP

Elizabeth Whalen, CFP Phill, Guay, CFP Joan Cassman, Hanson Bridgett, LLP Kaichang Li, Oregon State University Charles Grabiel, United Soybean Board Richard Royce, Hercules David Mullen, Hercules Jerry Uhland, CalAg, LLC Pat Hooper, Hooperwolfe, LLC Rick Fields, Neil Kelly Cabinets Jeff Hunt, Plywood & Lumber Sales Brian Gitt, Build It Green Tom Cooper, Kaiser Permanente Tom Lent, Healthy Building Network Eli Makus, Children NOW Tom Higgins, Formaldehyde Free Coalition Steve Pung, CFP Dennis Bradway, Mannington Erwin Schutfort, Professional Service Industries, Inc.

#### FORMAL BOARD ACTION:

The Board voted 7-0 (Roberts-abstained) to approve the proposed control measure with the additional modifications proposed by staff. In addition, the Board directed staff to report back on the status of enforcement and testing program by summer 2008, and annually thereafter during the initial years of the program.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

# 07-4-5: Public Meeting to Consider an Update on the Air Resources Board's Emission Reduction Plan for Ports and Goods Movement in California (Plan)

### SUMMARY OF AGENDA ITEM:

Staff highlighted progress since the November 2006 update, including: implementation of adopted Air Resources Board (ARB) rules for ship fuels and incineration, cargo handling equipment, and border trucks; release of the Administration's final Goods Movement Action Plan; issuance of four approaches to clean up drayage trucks; and proposals by U.S. Environmental Protection Agency (U.S. EPA) for tighter locomotive and marine engine

standards. The Clean Truck Program being proposed by the Ports of Los Angeles and Long Beach would complement ARB staff's approach on the upcoming drayage truck rule. Staff stressed that U.S. EPA needs to strengthen and accelerate its proposed standards to help California meet air quality standards by federal deadlines.

The next phase of the report covered activities in each major trade corridor. Bay Area activities include continued development of a health risk assessment for West Oakland, a maritime Port of Oakland air quality plan, and an air district proposal to establish emission caps for all ports in the region. The Ports of Los Angeles and Long Beach are proceeding to implement their Clean Air Action Plan, with a priority on the measure to cut port truck emissions. In San Diego, the port initiated development of its own clean air plan. Staff then focused on the impacts of freight transport from Mexico into San Diego County, sharing the results of a recent survey to understand truck fleet characteristics, fuels, and travel destinations. Staff described several mechanisms to reduce border truck emissions, including: the need for Mexican truck and fuel standards to align with U.S. standards, the upcoming ARB private fleets rule that would apply to all diesel trucks operating in California regardless of origin, and continued enforcement in the border region. The border element also covered a proposed trucking pilot project under the North American Free Trade Agreement and a possible "mega-port" in Punta Colonet, Mexico.

The second element of the update covered the enforcement activities and regulatory challenges for ships, harborcraft, trucks, locomotives, and cargo handling equipment. Staff focused on truck proposals in development – ARB's comprehensive private truck fleets rule and drayage truck rule, plus the other three port truck proposals from the Ports of Los Angeles and Long Beach, the Coalition for Clean & Safe Ports, and the shipping/retail industry. For locomotives, the first nine rail yard health risk assessments will be released this Spring at community meetings. Staff discussed the upcoming rules for ship main engine fuel, ship "at dock" emission reductions, and commercial harborcraft that are scheduled for Board consideration later this year.

Key activities for the remainder of 2007 include ARB rulemakings, port truck programs, U.S. EPA emissions standards, health risk assessments, and initiation of the Trade Corridors Emission Reduction Incentive Program with Proposition 1B monies. Board members discussed several issues with staff, such as: the competing port truck proposals, the coverage and penalties under

ARB's truck enforcement program, the ability of Mexican trucks to travel in California, proposals for additional truck crossings to relieve border congestion, and the Legislature's direction on implementing legislation for the Proposition 1B air quality and transportation bond funds.

The Board heard oral testimony from two witnesses. A private citizen discussed the efficiency of moving freight via truck versus rail, and encouraged the development of a comprehensive transport plan to address locomotive congestion in the Inland Empire. A Western States Petroleum Association representative emphasized California refiners' dependence on crude oil imports and stated the Association's desire to develop port environmental strategies that do not constrain the ability to increase oil supply.

# **ORAL TESTIMONY:**

Doug Korthof, Private Citizen
Tupper Hull, Western States Petroleum Association

FORMAL BOARD ACTION: None (Informational item)

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: No