

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
July 20, 2006

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

MEMBERS PRESENT: Chairman Robert Sawyer
Ms. Sandra Berg
Ms. Dorene D'Adamo
Supervisor Mark DeSaulnier
Dr. Henry Gong, Jr.
Ms. Lydia Kennard
Supervisor Barbara Patrick
Ms. Barbara Riordan
Supervisor Ron Roberts

Agenda Item #

06-7-1: Current Issues in Ultrafine Particle Research – ARB's Health and Exposure Research Program

SUMMARY OF AGENDA ITEM:

The Air Resources Board (ARB or the Board) 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 ultrafine particles and the research that ARB is funding to further our knowledge. The ARB is engaged in a number of research projects to address the sources, properties, and health effects of ultrafine particles. The sources include mobile and stationary combustion processes, secondary particle formation through atmospheric processes, and indoor sources. The spatial distribution of sources and transport are also important in defining personal exposure to ultrafine particles. The properties of ultrafine particles are related to their surface area and composition in addition to their size. The very small size of the particles allows them to penetrate deeply into the lungs, from which point their physical and compositional nature may play a role in health effects. They also are able to pass through the lung and into the blood and

are carried throughout the body. Health effects studies are investigating how ultrafine particles impact respiratory and cardiovascular health. Dr. Gong commented that the potential health effects of particulate matter are well known and that we have made progress in the health effects of fine, coarse, and even the ultrafine fractions. Dr. Gong went on to ask if there is a relative toxicity scale; i.e. how toxic are ultrafine particles relative to the fine and coarse particles? Staff explained that some work has been done, but more research is needed before we will be able to compare toxicity of the particle fractions. This area of research is a priority for the annual research plan. Board member Berg asked if confounding factors are taken into account in calculating premature mortality. Staff responded that diet, smoking, and a number of other factors are typically corrected for in the statistical calculations. Board member Berg also asked for a clarification of what is meant by premature mortality – is it loss of life or reduced life expectancy? Staff responded that studies use the term “premature mortality” to describe a statistical change in the number of persons dying in association with an event (i.e. an air pollution episode) or a level of air pollution exposure. Staff commented that the U.S. Environmental Protection Agency (U.S. EPA) has calculated loss of life expectancy for PM2.5 exposure, but not for ultrafine exposure.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

06-7-2: Briefing on the San Pedro Bay Ports Clean Air Action Plan

SUMMARY OF AGENDA ITEM:

The Ports of Los Angeles and Long Beach recently issued a joint five-year draft San Pedro Bay Ports Clean Air Action Plan (plan) identifying emission reduction strategies that can be implemented via leases, tariffs and other mechanisms under port authority. The draft plan is out for public comment and will be finalized and approved by the Harbor Commissioners later this year.

Staffs from the ARB, U.S. EPA, and South Coast Air Quality Management District (SCAQMD) participated in the development of the plan and generally endorse its objectives. However, the joint

port plan does not entirely match up with the respective policies, budgets or programs of these regulatory agencies. Over the next several months, air regulators and port authorities will continue to work on specific implementation mechanisms that avoid duplication of effort and capitalize on each other's jurisdictional strengths.

Dr. Ralph Appy, Director of Environmental Management at the Port of Los Angeles, introduced the ports' plan, describing the history of collaboration between the two ports and more recent coordination with the regulatory agencies on plan development.

Dr. Robert Kanter, Director of Planning and Environmental Affairs at the Port of Long Beach, presented an overview of the draft plan. Dr. Kanter discussed the impetus for the plan, highlighting the need to minimize the health risk from port operations and the desire to enable port development to accommodate increased international trade. He recognized that port-related sources, especially marine vessels, have not done their "fair share" to reduce emissions.

Dr. Kanter identified a series of measures the ports would pursue with their individual tenants to cut emissions and health risk from port trucks, ships, harborcraft, cargo-handling equipment, and locomotives. The key strategy focuses on cleaning up port trucks, through retrofit and replacement with cleaner diesel or natural gas vehicles. The ports are committing \$200 million for this strategy; the draft plan anticipates roughly \$1 billion more from the proposed transportation bond and other sources to fund this truck conversion. He also emphasized the ports' commitment to expand the dockside infrastructure at 22-28 berths to enable ships to plug into shore electrical power, instead of running their diesel auxiliary engines.

The primary implementation mechanism is for the ports as landlords to impose additional conditions in leases as they come up for renewal or modification. Dr. Kanter also described the tariff charges ports can levy on cargo, either as incentives for environmentally-beneficial actions or disincentives for higher-polluting activities. The ports expect to include emission reduction strategies as part of their mitigation measures under the California Environmental Quality Act for port expansion projects.

Dr. Kanter quantified the ports' total financial commitment at \$400 million over the next five years to mitigate the air quality impacts of port operations and appealed for a large portion of the \$1 billion State bond if approved by the voters. He concluded his presentation by discussing the public outreach on the plan.

Drs. Appy and Kanter responded to questions from the Board members on the overall benefits of the plan, the total cost to implement the plan, the ability to deliver the electrical power that would be needed for ships at dock, and the number of port trucks needing upgrade. They also agreed to return in about a year with an update, as requested by the Board.

Ms. Catherine Witherspoon, ARB Executive Officer, highlighted upcoming Board regulatory items for harbor craft fleets and private truck fleets, as well as the policy issue regarding how to split the financial burden between the State and the affected industries. She also described the air quality activities underway with the Ports of Oakland and Stockton. Mr. Michael Scheible, ARB Deputy Executive Officer, recognized the strong working relationship between the ports and the regulatory agencies. He also described the complementary nature of the ports' efforts and ARB's regulatory actions.

The Board heard oral testimony from two witnesses. Dr. Barry Wallerstein, SCAQMD Executive Officer, recognized the leadership of the ports and the contribution of ARB through Board adoption of rulemakings and approval of the Emission Reduction Plan for Ports and Goods Movement, port and rail yard risk assessments, and staff participation in development of the ports' plan.

Ms. Williams of the California Trucking Association focused on the proposal to clean up port trucks. She recommended a working group with trucking companies, disputed ARB's authority to regulate mobile sources, and advocated a legislative solution to set registration and entry requirements for all trucks operating in California. Ms. Witherspoon emphasized the need for participation from the trucking association and labor representatives in crafting the port truck program.

ORAL TESTIMONY:

Dr. Barry Wallerstein, South Coast Air Quality Management District
Ms. Stephanie Williams, California Trucking Association

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: No

06-7-3: Public Meeting to Consider the Draft Report, "Planned Air Pollution Research, Fiscal Year 2006-2007"

SUMMARY OF AGENDA ITEM:

Staff presented the draft report entitled, "Planned Air Pollution Research, Fiscal Year 2006-2007," which contained research projects addressing areas of health and welfare effects, exposure assessment and technology advancement and global air pollution. The report describes proposed research projects; some recommended for funding and others recommended if funding becomes available.

ORAL TESTIMONY: None.

FORMAL BOARD ACTION:

The Board approved Resolution 06-22, approving the research plan, after adding a provision dedicating ARB's annual health research program to the memory of Dr. William F. Friedman, a leading advocate for the protection of children's health during his eight-year tenure on the Board.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: Yes

06-7-4: Public Hearing To Consider Amendments To The California Regulations For New 1997 And Later Off-Highway Recreational Vehicles And Engines

SUMMARY OF AGENDA ITEM:

The staff recommended the Board approve the amendments to the following sections of title 13, California Code of Regulations, and the documents incorporated by reference therein: Chapter 9, Off-Road Vehicles and Engines Pollution Control Devices; Article 3, Off-Highway Recreational Vehicles and Engines; sections 2411-2413 and 2415; and the incorporated "California Exhaust Emission Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines."

The changes included 1) adoption of evaporative emission standards for fuel tanks and hoses, equivalent to those required federally, becoming effective in 2008; 2) reclassification of off-road

utility vehicles from the large spark-ignition category, which will allow the manufacturers of off-road utility vehicles to use the all-terrain vehicle test procedure, as is allowed federally; 3) clarification of engine labeling requirements; and 4) amendment of the riding seasons (section 2415) to improve uniformity and facilitate more efficient enforcement by the park rangers and land managers.

At the hearing, the staff also recommended modifications to the off-highway recreational vehicle classification in the original proposal to include sand cars and similar vehicles.

ORAL TESTIMONY:

John Paliwoda, California Motorcycle Dealers Association
Pamela Amette, Motorcycle Industry Council
Tom Austin, Sierra Research, for the Motorcycle Industry Council
Susan Matthews, Points West Argo, Inc.
Robert Wyman, Latham and Watkins
John Begin, Suspensions Unlimited

FORMAL BOARD ACTION:

The Board adopted Resolution 06-23, which approved the staff's proposal with the modifications described at the hearing. The changes from staff's originally noticed proposal will be made available for a supplemental 15-day comment period before final adoption by the Executive Officer.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

06-7-5: Public Meeting to Consider an Update on the Implementation of the ARB/Railroad Statewide Agreement

SUMMARY OF AGENDA ITEM:

The staff presented to the Board an update on the implementation of the statewide railroad pollution reduction agreement (Agreement) with Union Pacific (UP) Railroad and BNSF Railway. The Agreement has been in effect since June 24, 2005, and all of the required milestones to date have been met. The Board also heard public testimony.

Both railroads met the requirement to install idle reduction devices on 35 percent of the unequipped intrastate locomotives over the past year. The railroads had installed idle reduction devices on 117 intrastate locomotives prior to the agreement. Over the last year, 113 more idle reduction devices were installed, bringing the total to 230. Idle reduction devices have now been installed in over 50 percent of the nearly 438 UP and BNSF intrastate locomotives operating in California.

The railroads are currently on schedule to comply with the ARB diesel fuel regulation for intrastate locomotives by January 1, 2007. In addition, both railroads are on schedule to comply with the Agreement's requirements for a minimum use of 80 percent low sulfur (15 ppmw) diesel fuel for locomotives by January 1, 2007.

The railroads are currently meeting the annual 99 percent compliance rate for visible emissions. In addition, staff has worked with an advisory committee comprised of the South Coast and Sacramento air districts, UP and BNSF railroads, and community representatives to develop a locomotive remote sensing pilot program pursuant to the requirement of Assembly Bill 1222.

To support the enforcement effort, ARB has trained over 45 ARB and local district staff. Staff has completed enforcement inspections at the 31 designated and covered rail yards in California. Almost 700 locomotives were observed to determine their compliance with the anti-idling provisions of the agreement. Over 96 percent of the locomotives observed were in compliance. However, 23 locomotives were cited for excessive idling and one for excessive smoke.

In cooperation with the railroads, ARB conducted 12 community meetings since January, thus completing the Agreement requirements for early meetings. The ARB and the railroads also conducted two technology workshops in April and July and representatives from ARB, SCAQMD, and the railroads visited Europe to gain a better understanding of their rail infrastructure and locomotive emission control technologies.

Staff has also released draft guidelines for preparing emission inventories and performing health risk assessments. Workshops are scheduled in Sacramento and Los Angeles on August 28 and 30, respectively, to discuss the draft guidelines.

Following the staff presentation, the Board received public testimony from nine individuals. Maureen Kane, representing

Board member Ronald Loveridge, expressed support for the progress made in implementing the Agreement. Four SCAQMD representatives commented on a variety of issues related to enforcement, nuisance, impacts the Agreement has on pending litigation, and the need to push for more stringent locomotive emission controls. Four representatives from the railroad industry testified in support of the Agreement and indicated that they were committed to continuous compliance with the Agreement provisions.

After considering the testimony, the Board directed the staff to return with another update on the implementation of the Agreement in six months.

ORAL TESTIMONY:

Maureen Kane, (representing ARB Board member Loveridge)
Barry Wallerstein, SCAQMD
Ed Pupka, SCAQMD
Kurt Wiese, SCAQMD
Henry Hogo, SCAQMD
Mark Stehly, BNSF Railway
Lupe Valdez, Union Pacific Railroad
Mike Barr, Association of American Railroads
Kirk Marckwald, Association of American Railroads

FORMAL BOARD ACTION: Informational Item (Board Update)

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes