State of California
AIR RESOURCES BOARD
Summary of Board Meeting
May 26, 2005
California Air Resources Board
Byron Sher Auditorium, Second Floor
1001 I Street
Sacramento, California

MEMBERS PRESENT: Hons. Barbara Riordan, Acting Chairman
Sandra Berg
Mark DeSaulnier
Dr. Henry Gong
Lydia Kennard
Ronald Loveridge
Ron Roberts

AGENDA ITEM #

05-5-4: Public Meeting to Update the Board on Hydrogen Highway

SUMMARY OF AGENDA ITEM:

Staff gave an informational update on the California Hydrogen Highway Network (CA H2 Net), and the Board heard presentations from the California Fuel Cell Collaborative and California Fuel Cell Partnership on recent activities in their hydrogen programs.

The California Hydrogen Highway Network is a State initiative to promote the use of hydrogen as a means of diversifying our sources of transportation energy used while ensuring environmental and economic benefits.

Over the last year, more than 200 stakeholders worked to develop a Blueprint Plan for the CA H2 Net, which was delivered to the Governor in March 2005.

Meanwhile, existing hydrogen efforts in California have accelerated over the past year – creating new partnerships in California and strengthening support for a hydrogen economy. The California Fuel Cell Partnership reported expansions in their technical and outreach programs that act as a critical foundation for the broader efforts to be made by the State. The California Stationary Fuel Cell Collaborative presented their progress in working with stationary

fuel cell manufacturers to provide electricity and co-generation benefits that would otherwise be wasted. This achievement will be an important contribution to California's ability to provide abundant, affordable and clean power to homes and industries in the future.

During the meeting, Board members were invited into the California Environmental Protection Agency courtyard for a press event announcing Governor Schwarzenegger's endorsement of the CA H2 Net Blueprint Plan, and DaimlerChrysler's presentation of three fuel cell vehicles to the California Air Resources Board, the California Energy Commission and the California Department of General Services.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: Informational only.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: No

05-5-1: HEALTH UPDATE: Prenatal Exposure to Polycyclic Aromatic Hydrocarbons and the Development of Respiratory Symptoms in Young Infants

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 results of a study of pregnant women and their infants exposed to environmental tobacco smoke and airborne polycyclic aromatic hydrocarbons (PAH). The study by Rachel Miller and colleagues was published in the journal Chest in 2004 (Chest: 126(4): 1071-1078). PAHs were the focus of this study because they are highly toxic components of combustion air pollution, such as diesel exhaust, residential heating and tobacco smoke. Researchers enrolled 303 non-smoking pregnant Latina and African American women from New York City who subsequently completed extensive questionnaires and personal air monitoring to assess their level of exposure to a variety of environmental pollutants. In addition, cotinine (a metabolic product of nicotine) was measured in the blood and used as a proxy for exposure to environmental tobacco smoke (ETS). The respiratory health of the newborns was followed from birth to 24 months of age. The authors found that neither prenatal exposure to PAHs nor

environmental tobacco smoke, alone, were associated with discernable differences in respiratory symptoms within the study group. However, infants exposed to both PAHs during pregnancy *and* environmental tobacco smoke after birth experienced between 25-60 percent more respiratory symptoms, such as cough, wheeze, and difficulty breathing. These symptoms also worsened as the infants got older.

This study is important because it is the first published research to consider the association between prenatal (pre-birth) exposure to air pollution and effects on the respiratory health of developing infants. Future research in this area will likely yield additional important information on how early exposures to air pollution can affect respiratory health later in life.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item).

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

05-5-2: Public Hearing to Consider Research Proposal

SUMMARY OF AGENDA ITEM: Staff presented one research proposal entitled:

- "Characterization of the Off-Road Equipment Population".

Mrs. Riordan asked staff to include language in the contract that will require the contractor to conduct a special outreach to stakeholders.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: The Board unanimously approved Resolution Number 05-27.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: Yes

05-5-3: Public Meeting to Consider Proposed Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines

SUMMARY OF AGENDA ITEM:

At the May 26, 2005 Board meeting, staff presented Proposed Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines (ATCM). These proposed amendments permanently revise the ATCM to coincide with temporary emergency regulatory changes adopted by the Board at its March 17, 2005 meeting (Resolution 05-29). These changes replaced the 0.15 grams per brake horsepower-hour (g/bhp-hr) particulate matter (PM) emission limit for greater than 50 to less than 175 hp new stationary diesel agricultural pump engines with Air Resources Board (ARB or Board) and federal new off-road engine PM certification standards for engines of the same brake horsepower and model year.

Also, as a result of comments received, the staff presented several modifications to the original proposal released on April 8, 2005. The proposed modifications included:

- Aligning the ATCM's PM requirements with ARB and federal new off-road engine PM certification standards (similar to the changes made for agricultural pump engines) for greater than 50 to less than 175 hp new stationary diesel: agricultural wind machine engines and all other agricultural engine applications except gen-set applications, and direct-drive emergency standby fire pump engines.
- Extending new stationary diesel direct-drive emergency standby fire pump engine compliance with Tier 3 and Tier 4 new off-road engine PM certification standards three years.
- Allowing the operation of in-use stationary diesel emergency standby engines in conjunction with, and as back up for, the electric power grid during U.S. Department of Defense missile launch tracking.
- Clarifying in-use stationary diesel emergency standby engine maintenance and testing requirements at hospitals and at schools where students live on-site.
- Clarifying compliance requirements for new stationary diesel engines approved for installation prior to the effective date of new PM emission limits.

ORAL/WRITTEN TESTIMONY:

Tim French, Engine Manufacturers Association
Randall Friedman, Department of Defense, California Government Affairs
Rick Bishop, John Deere
John Whitney, Clarke Fire Protection Products, Inc.
Karl Lany, SCEC Air Quality Specialists
Charlie Simpson, Quinn Power Systems
Manuel Cunha, Nisei Farmers League
Shirley Batchman, California Citrus Mutual

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 05-33 adopting the proposed amendments with staff's proposed modifications.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

05-5-5: Public Meeting to Update to the Board on Liquefied Natural Gas and Natural Gas Quality in California

SUMMARY OF AGENDA ITEM:

The staff briefed the Board on how the importation of liquefied natural gas (LNG) would impact the quality of natural gas in California. Staff presented the historical and projected supply and demand of natural gas. These indicators show that California will need to acquire new sources of natural gas supplies. One potential source is imported LNG.

Staff presented information on several proposed LNG projects that are under evaluation with the earliest project estimated to be in operation by 2008. One LNG project can replace about one seventh of California's current natural gas demand which could significantly supplement the natural gas supply in California and impact its quality.

Staff discussed the quality of California's natural gas. Most imported sources of LNG have significantly different qualities (e.g. energy content) than what currently exists in California. A significant change in California's natural gas energy content can

adversely impact the operation of stationary and mobile sources as well as emissions from these sources.

In addition, staff discussed the Air Resources Board's compressed natural gas (CNG) specifications for motor vehicle fuel and issues related to compliance with those specifications. Presently, California natural gas producers in the South Central Coast, Southern San Joaquin Valley, and portions of the Los Angeles Basin have difficulty meeting these specifications. Most worldwide sources of LNG also do not meet the CNG specifications.

Staff presented a summary of efforts to examine the ability to modify the current CNG specifications to make these specifications more flexible without sacrificing air quality benefits and make additional sources of natural gas supplies available to California.

ORAL TESTIMONY:

Mr. David Maul, California Energy Commission
Mr. Joe Sparano, President, Western States Petroleum Association
Mr. John Martini, California Independent Producers Association
Mr. Rick Morrow, San Diego Gas and Electric and Southern California Gas Company

FORMAL BOARD ACTION: Informational Item

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: None