State of California AIR RESOURCES BOARD

Resolution 89-31

March 10, 1989

Agenda Item No.: 89-5-2

WHEREAS, Health and Safety Code Section 39602 designates the Air Resources Board (ARB or Board) as the state agency responsible for the preparation of the State Implementation Plan (SIP) required by the Clean Air Act (42 U.S.C. Secs. 7401 et seq.) and responsible for coordinating the activities of all districts necessary to comply with that Act;

WHEREAS, the Bay Area Air Quality Management District (District), on December 15, 1982, adopted an air quality management plan which contained measures and commitments to adopt additional measures to control carbon monoxide (CO) emissions and emissions of ozone precursors and which was intended to provide for attainment of the national ambient air quality standards (NAAQS) for CO and ozone by December 1987;

WHEREAS, the 1982 Plan included provisions to adopt contingency measures for ozone and CO if emission reduction targets were not met;

WHEREAS, the 1982 Plan was forwarded by the ARB to the EPA and approved by the EPA on December 28, 1983;

WHEREAS, federal law requires that measures committed to in the SIP be adopted and implemented on schedule;

WHEREAS, the EPA has notified the Governor that the SIP for the Bay Area failed to attain the NAAQS for CO and ozone and must be revised;

WHEREAS, the ARB and the District have begun a new planning effort to attain the state ambient air quality standards as required by the California Clean Air Act, authored by Assemblyman Sher (Stats 1988, ch 1568) and by AB 3971, authored by Assemblyman Cortese (Stats 1988, ch 1569);

WHEREAS, this planning effort will require:

- 1. Adoption of new control measures and programs to reduce emissions from new and existing stationary, mobile, area, and indirect sources.
- Adoption of transportation control measures,
- 3. An assessment of pollutant transport from the Bay Area to the Sacramento and San Joaquin Valleys and to the North Central Coast Air Basin and establishment of mitigation requirements if transport is identified, and

ITEM NO.:

DATE: April 13, 1989

State of California

AIR RESOURCES BOARD

ITEM:

Research Proposal No. 1636-145 entitled "Methanol Fuel Additive Demonstration"

RECOMMENDATION:

Adopt Resolution 89-32 approving Proposal No. 1636-145 for an amount not to exceed \$339,348.

SUMMARY:

The objective of this project is to demonstrate a fuel additive package for neat methanol (M100) that will avert any potential problems with flame luminosity, ignition limits, cold starting, lubricity, and other safety considerations (odor, color, taste) when methanol fuel is used in light-duty and heavy-duty vehicles. This is a joint-funded study sponsored by the ARB and the South Coast Air Quality Management District (SCAQMD). The SCAQMD has committed \$100,000 towards this study.

The proponent will identify additives that exhibit the most promise to alleviate concerns identified with commercial use of methanol fuel in motor vehicles. Following the identification, the proponent will experiment with combinations of different additives to develop additive packages which address the maximum number of concerns with widespread usage of methanol. These additive packages will be evaluated by conducting engine testing and short-term vehicle demonstrations, and by conducting 10,000 mile demonstrations in dedicated methanol and flexible fuel vehicles. Finally the proponent will conduct a long-term demonstration (20,000 miles) using the dedicated methanol fuel vehicle.

Three proposals were received in response to the ARB's Request for Proposals. The proposal from Southwest Research Institute is recommended for funding by the Research Screening Committee. The principal investigator will be Dr. E. Robert Fanick.