

Phase 2 Reformulated Gasoline Performance Subcommittee

Meeting Summary November 15, 1994

I. Introduction

The performance committee discussed the following key issues regarding the Phase 2 Reformulated Gasoline performance and compatibility demonstration efforts:

- Results of Phase 2 Gasoline Test by Federal Express
- On-Road Test Protocol
- Bench Test Program
- Criteria for Identifying Potential Vehicle Problems
- Test Fuel Explosivity

The minutes from the October 4, 1994 meeting were approved with no changes. Copies of presentations given at the meeting are enclosed with this summary.

II. Results of Phase 2 Gasoline Test by Federal Express

The Federal Express Clean Fleet Project tested several fuels over a 2 year period in Southern California. Phase 2 Reformulated Gasoline (RFG) was tested. There were no fuel related problems from Reformulated Phase 2 Gasoline (RFG).

III. On-Road Test Protocol

Discussion was held regarding the current availability of vehicles for the test program. ARB staff requested suggestions of alternative fleets to increase the number of pre-1985 vehicles and imports. Many of the currently identified potential fleets have only newer domestic vehicles and have not committed to participating in the test program yet.

ARB staff will provide a list of the currently selected vehicles to subcommittee members for their review. Additionally, staff has been attempting to collect repair information for the vehicle population, and staff findings will be reported at the next meeting.

The vehicle evaluation survey forms have been modified to reflect the changes suggested by members from the previous meetings with some additional changes. Visual inspections of vehicles will still be done on a monthly basis, but the driveability incidence log will only be used to report problems, rather than to report on a weekly basis. The December Revised Test Protocol, enclosed, contains a copy of the latest forms. These forms also incorporate changes suggested at this meeting.

Some questions were raised as to how feasible the specifications for the test fuel were for the fuel blender. To ease the process in contracting for test fuel, subcommittee members agreed to allow changing the upper limit on the T90 specification from 300 to 310 degrees if 310 degrees becomes necessary for practical blending.

Contact: Nelson Chan (916) 327-1510

IV. Bench Test Program

GM will bench test the following five fuels for various elastomer property changes:

- Baseline - RFA
- Phase 2 Basic/Vehicle Test Fuel
- Phase 2 Ethanol - Blended Test Fuel
- Phase 2 Low - Aromatic Test Fuel
- ASTM Fuel C - to be used for internal checking of the results

Data from the GM bench tests are expected to be available in May or June 1995. GM will compare the swell characteristics of the elastomers and determine whether a problem could be expected, but they will also provide the results to other automobile manufacturers for their independent analysis.

Ford Motor Company proposed to bench test six fuels to study the effects of various lubricity levels. The test will provide a relative ranking of the fuels for their wear characteristics and should address mechanical wear issues in fuel pumps and injectors.

Contact: Gerald Barnes (GM) (313) 556-7723

V. Test Fuel Explosivity

Chevron is testing the flammability of low RVP fuels for oxygenated and non-oxygenated fuel blends. Testing started

in October 1994 and is expected to be complete near the end of April 1995.

Enclosures

[CBG Program Advisory and Subcommittee Activities](#)