Workshop Regarding Regulatory Fuels Activities

July 12, 2001

California Environmental Protection Agency

Air Resources Board

Agenda

- Introductions
- Review of MTBE and other Deminimus Levels in CaRFG3 Regulations
- Results from the California Energy Commission Survey of Ethanol Producers
- Ongoing Work on Commingling from the Effects of Ethanol in Gasoline
- Ongoing Work on Permeation from the Effects of Ethanol in Gasoline
- Development of CaRFG3 Vehicle Certification Fuel Standard Regulations
- Presentations from Others
- Open Discussion
- Closing Remarks

MTBE Deminimus Levels

- Review current CaRFG3 MTBE deminimus limits
- Change current MTBE deminimus limits to oxygen content equivalent
- 0.3 percent volume MTBE is about 0.06 percent weight oxygen
- 0.15 percent volume MTBE is about 0.03 percent weight oxygen

Results from the Recent California Energy Commission Survey of Ethanol Producers

Pat Perez

Office of Transportation Fuel Supply & Demand

Ongoing Work on Commingling from the Effects of Ethanol in Gasoline

Ongoing Work on Commingling

- Board prohibited use of MTBE beginning December 31, 2002
- Federal oxygen requirement still in place
  - Ethanol will be only allowable oxygenate
  - 70% of California fuel
- Board directed the staff to further evaluate real-world impacts of mixing (commingling) ethanol and non-ethanol gasoline

Evaluation of Real-World Impacts

- ARB Commingling Study
  - Established ARB/Industry working group
  - Evaluate consumer refueling practices
  - Vehicle fuel sampling program

ARB/Industry Commingling Study Working Group

- Continuing efforts to fulfill staff's data needs regarding consumer refueling practices
  - Industry members to report on availability of information from industry marketing data
  - Possibility of conducting public survey
- Discussions regarding ongoing development and implementation of the fuel sampling program
  - Results from preliminary field work
  - Need for additional focused study to capture ethanol blends

Commingling Study
Vehicle Fuel Sampling Program

- Completed Preliminary Bay Area Field Work
  - Three teams, two days, six stations
  - 99 voluntary participants
  - About 60% sampling success rate
  - Revealed only minor revisions needed to protocol
  - Complete laboratory results not yet available
- Actual testing to be conducted in Lake Tahoe, Bay Area, and Los Angeles during August & Sept.
  - Need for industry members to identify/recommend additional site locations

Ongoing Work on Permeation from the Effects of Ethanol in Gasoline

Ongoing Permeation Emission Evaluation

- Contract awarded to investigate potential permeation emissions losses
  - Performed literature search for permeation rates with ethanol and non-ethanol gasolines
    - Confirms ethanol increases permeation emission losses
    - literature search results have been posted on our webpage
  - Gathering data on permeable fuel system materials in vehicle fleet to estimate statewide permeation emissions
  - Design test program to evaluate permeation rates to increase available data
- Final report is available on the ARB's Cleaner-Burning Gasoline webpage

Ongoing Permeation Emission Evaluation (continued)

- The ARB staff will conduct a test program to evaluate the permeation emissions associated with ethanol in California gasoline and will report to the Board on its progress by the end of the year.

Development of CaRFG3 Vehicle Certification Fuel Standard Regulations

CaRFG3 Certification Fuel

- Plan regulatory update to the CaRFG2 certification fuel specifications
- Planning additional workshops in the near future
- Will work closely with auto, oil, and ethanol industries and the ARB Mobile Source Control Division
- Scheduled for consideration by the ARB Board in November 2001

Presentations by Others

Open Discussion

Closing Remarks