

AGENDA ITEM 94-2-1

PUBLIC HEARING TO CONSIDER ADOPTION OF AMENDMENTS TO REGULATIONS REGARDING EVAPORATIVE EMISSION STANDARDS AND TEST PROCEDURES APPLICABLE TO 1995 AND SUBSEQUENT MODEL-YEAR PASSENGER CARS, LIGHT-DUTY TRUCKS, MEDIUM-DUTY VEHICLES, AND HEAVY-DUTY VEHICLES

Following are copies of the slide presentation which supported the Air Resources Board's oral staff presentation given by Ms. Susan Kwan, which commences on page 36 of the transcript.

Attachments

Amendments to the California Evaporative Emissions Regulations

February 10, 1994
Sacramento, CA

OBJECTIVES

- Amendments for technical clarifications and increased testing efficiency and practicality
- Alignment of the California evaporative emissions regulations with the Federal procedures

ENHANCED TEST PROCEDURES

- Adopted by the Board in Nov 1990
- Representative of real world conditions
 - Real time three-day diurnal
 - High temperature 1-hr hot soak
 - High temperature running loss
- Emissions reductions: 79% or 400 tpd by the 2010

FEDERAL TEST PROCEDURES

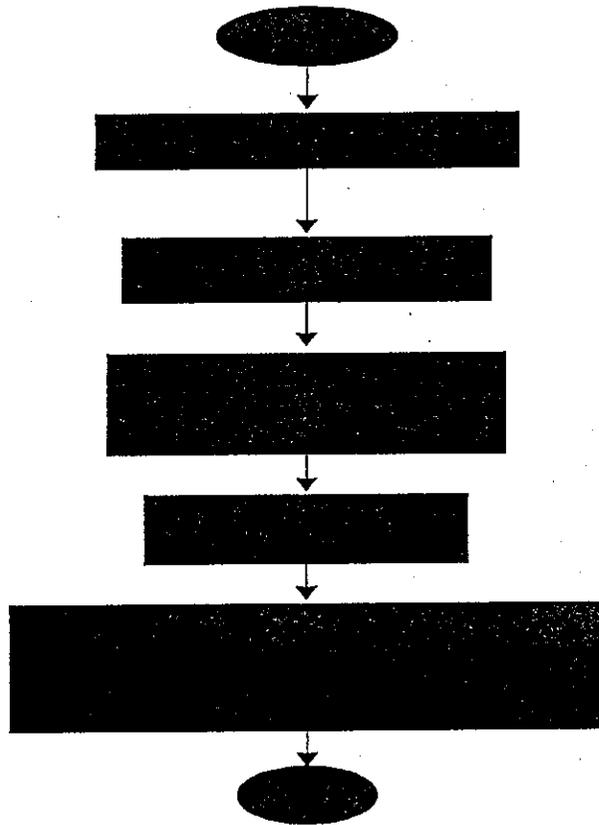
- Promulgated in March 1993
- Duplicated ARB regulations with the following changes:
 - Addition of a supplemental test
 - Fuel RVP and test temperatures
 - Relaxed emission standards
 - Technical revisions

PROPOSED AMENDMENTS

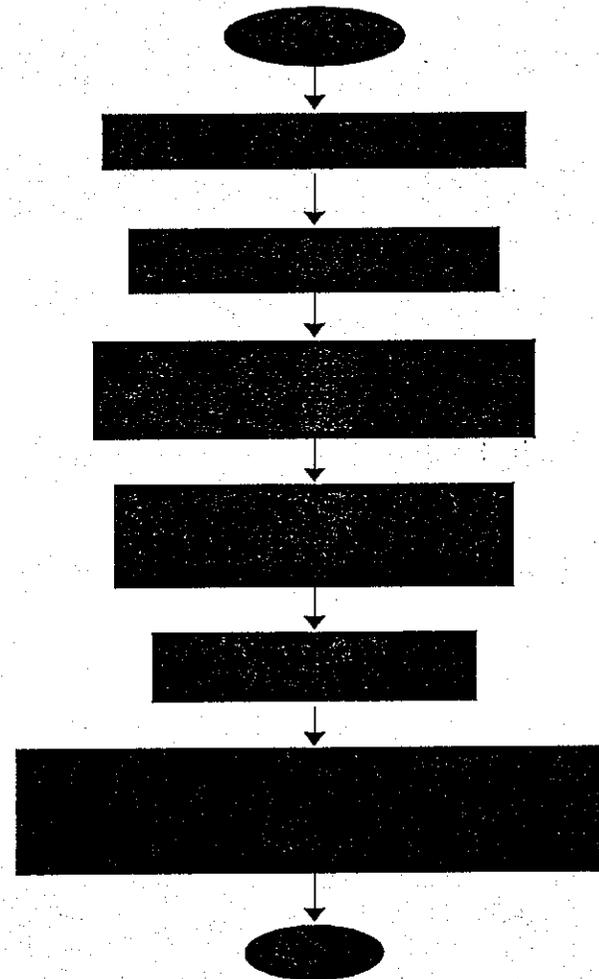
- Federal Supplemental Test
- Complete Medium-Duty Vehicles from 8,501 to 14,000 lbs GVW
- Alignment with the Federal Procedures
- Improvements to the ARB Procedures

Proposed Test Procedures

Supplemental Test



Enhanced Test



Supplemental Test Purpose

Ensures rapid canister purge thereby providing assurance of evaporative emissions control during short trips

Proposed Supplemental Standards

Class of Vehicles	Diurnal + Hot Soak (g/test)
Passenger Cars	2.5
Light-Duty Trucks	2.5
Medium-Duty Vehicles (6,001-8,500 lbs. GVWR)*	2.5
(8,501-14,000 lbs. GVWR)	3.5
Heavy-Duty Vehicle (over 14,000 lbs. GVWR)	4.5

* 3.0 g/test: vehicles with fuel tanks of at least 30 gal

PROPOSED AMENDMENTS

- Federal Supplemental Test
- Complete Medium-Duty Vehicles from 8,501 to 14,000 lbs GVW
- Alignment with the Federal Procedures
- Improvements to the ARB Procedures

Medium-Duty Vehicles *

- Relaxed 3-day diurnal plus hot soak emission standard of 3.0 g/test
- Unchanged running loss standard of 0.05 g/mile

* Complete vehicles from 8,501 to 14,000 lbs GVWR only

PROPOSED AMENDMENTS

- Federal Supplemental Test
- Complete Medium-Duty Vehicles from 8,501 to 14,000 lbs GVW
- Alignment with the Federal Procedures
- Improvements to the ARB Procedures

Alignment with Federal Procedure

- Numerous technical amendments to improve procedural effectiveness, practicality, and clarity
- Improves consistency in California and Federal requirements
- Agreement among manufacturers

PROPOSED AMENDMENTS

- Federal Supplemental Test
- Complete Medium-Duty Vehicles from 8,501 to 14,000 lbs GVW
- Alignment with the Federal Procedures
- Improvements to the ARB Procedures

Improvements to Testing

- Minor improvements specific to the ARB regulations
- Increased flexibility to the implementation schedule and certification process
- Clarified testing requirements

ADDITIONAL REVISIONS

- Diurnal + hot soak standards for light MDVs with large fuel tanks
- Certification process requirements
- Testing requirements
- Other technical revisions

ISSUES OF CONTROVERSY

EMISSIONS BENEFITS/COSTS

- Net emissions benefit: 3 tpd HC
- Costs^{*}: \$11 per vehicle
- Cost effectiveness^{*}: \$0.17 per pound of HC

*From complete medium-duty vehicles from 8,501 to 14,000 lbs. GVW

RECOMMENDATIONS

- Adopt the supplemental standards and test procedure
- Adopt the enhanced test procedures for medium-duty vehicles from 8,501 to 14,000 lbs GVW
- Approve amendments for improved testing and federal alignment