

State of California
Environmental Protection Agency
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE
CERTIFICATION REQUIREMENTS AND PROCEDURES FOR LOW-EMISSION
PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM-DUTY VEHICLES

Approved by: Resolution 95-40

Adopted by: Executive Order G-96-032
Executed: June 24, 1996

Agenda Item No.: 95-9-1

Public Hearing Date: September 28, 1995

Issuing Authority: Air Resources Board

Comment: Several comments were received identifying significant environmental issues pertaining to this item. The issues involved the increased emissions of directly-emitted particulate matter (PM) and carbon monoxide (CO) that will result from the relaxation of the PM and CO emission standards for medium-duty Ultra-Low-Emission Vehicles (ULEVs). These issues were identified and addressed on pages 45-46 of the Staff Report. The comments were also summarized and addressed on pages 13-15 of the Final Statement of Reasons. Both of these documents, along with Resolution 95-40, are incorporated by reference herein. Resolution 95-40 is also attached hereto.

A major element of this rulemaking is the adoption of generally more stringent standards for medium-duty vehicles and engines (collectively referred to as MDVs). The primary objective has been to reduce emissions of oxides of nitrogen (NO_x) from MDVs in an amount equal to or exceeding the emission reductions that would result from the MDV element in the State Implementation Plan (SIP) adopted by the ARB in November 1994. The amendments achieve that objective. The staff has identified the total baseline NO_x emissions from MDVs prior to implementation of the amendments as about 89 tons per day (tpd) in 2010 in the South Coast Air Basin. The amendments are projected to reduce these NO_x emissions by 23.9 tpd--a reduction of about 27%. California has six areas of non-attainment for the federal ambient air quality standard for ozone, and NO_x control is a critical element in California's plan to meet the federal and state ozone standards.

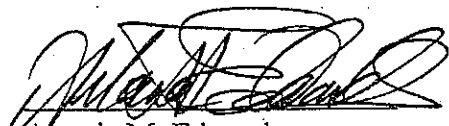
NOx controls on diesel engines tend to increase directly emitted PM. NOx controls also tend to increase emissions of CO. In order to give manufacturers a greater chance of success in developing low NOx strategies to meet the new substantially more stringent NOx requirements, the Board relaxed the ULEV PM standard to LEV levels for medium-duty ULEVs certified to the optional heavy-duty engine standards, and relaxed the ULEV CO standards to LEV levels for both engine-certified vehicles and chassis-certified MDVs.

The projected increase in directly-emitted PM resulting from the amendments is 0.8 tpd. The lower NOx emissions will mitigate this increase by reducing the formation of secondary PM in the atmosphere by approximately 12 tpd (one of the constituents of secondary particulate is ammonium nitrate, which is formed from NOx in the atmosphere). The contribution of MDVs to the total CO inventory is relatively minor, and the amendments are projected to increase MDV CO emissions in the South Coast Air Basin to about 322 tpd from about 298 tpd. Since the total CO inventory is 6600 tpd for the South Coast Air Basin, it is not anticipated that this slight increase will significantly affect the CO attainment status of that basin or other areas.

The staff's most recent technology assessment is that there is no alternative to allowing higher ULEV PM and CO standards in order to assure achievement of the needed NOx emission reductions. In Resolution 95-40, the Board found that there are no feasible mitigation measures or alternatives that would reduce the potential environmental impacts from increased CO and PM emissions, while at the same time providing the substantial overall health benefits from the significant NOx (and non-methane organic gas) emissions reductions realized by the regulations.

Response: See above.

Certified:



Artavia M. Edwards
Regulations Coordinator

Date:

12 Jul 96