

## ATTACHMENT I

### Proposed Additional Modifications to the Text of the “LEV II” Amendments

The following text shows the additional modifications to the previously proposed regulatory text. Unless otherwise indicated below, the originally proposed new provisions are shown in normal type, the proposed modifications posted on the Air Resources Board (ARB) Internet site March 26, 1999 are shown in underline to indicate additions and ~~strikeout~~ to show deletions, and the second set of modifications now being made available is shown in double underline to indicate additions and ~~**bold italicized strikeout**~~ to indicate deletions. Only those portions of the regulatory text that contain proposed supplemental modifications are shown below.

1. Modify title 13, CCR, section 1961(a)(10) and Part I, Section E.4.3 of the “California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles” (hereafter the 2001+ LDV/MDV Exhaust TPs) as follows:

(10) [or E.4.3] *Intermediate In-Use Compliance Standards.* ~~Prior to the~~ For ~~vehicles introduced in the 2004 through 2006 model years,~~ test groups certified prior to the 2007 model year, the following intermediate in-use compliance standards shall apply for the first two model years ~~after introduction of a~~ the test group is certified to a ~~the~~ new standard. For SULEVs certified prior to the 2004 model year, the following intermediate in-use compliance SULEV standards shall apply through the 2006 model year.

Emission Category	Durability Vehicle Basis	LEV II PCs and LDTs		LEV II MDVs 8500 - 10,000 lbs. GVW
		NMOG	NOx	NOx
LEV/ULEV	50,000	n/a	0.07	n/a
	120,000	n/a	0.10	0.3
SULEV	120,000	<del>0.015</del> <u>0.02</u>	<del>0.025</del> <u>0.03</u>	0.15

*The text modifications reflect the staff’s original intent for the timing of the intermediate in-use standard, and the SULEV NMOG and NOx values are modified to conform with the Staff’s Suggested Modifications to the Original Proposal that was released at the hearing.*

2. Modify title 13, CCR, section 1961(b)(2) and part I, Section E.2.2 of the 2001+ LDV/MDV Exhaust TPs as follows:

(2) [or 2.2] LEV II Phase-In Requirement for PCs and LDTs. Beginning in the 2004 model year, a manufacturer, except a small volume manufacturer, shall certify a percentage of its PC and LDT fleet to the LEV II standards in section 1961(a) according to the following phase in schedule:

<u>Model Year</u>	<u>PC/LDT1 (%)</u>	<u>LDT2 (%)</u>
<u>2004</u>	<u>25</u>	<u>25</u>
<u>2005</u>	<u>50</u>	<u>50</u>
<u>2006</u>	<u>75</u>	<u>75</u>
<u>2007</u>	<u>100</u>	<u>100</u>

In determining compliance with the phase-in schedule, the fleet shall consist of LEV I and LEV II PCs and LDT1s for the PC/LDT1 calculation, and LEV I and LEV II LDT2s for the LDT2 calculation. LEV I MDVs are not counted in the calculation until they are certified as LEV II LDT2s.

A manufacturer may use an alternative phase-in schedule to comply with these phase-in requirements as long as equivalent NOx emission reductions are achieved by the 2007 model year from each of the two categories -- PC/LDT1 and LDT2. Model year emission reductions shall be calculated by multiplying the percent of either PC/LDT1 or LDT2 vehicles meeting the LEV II standards in a given model year (based on a manufacturer's projected sales volume of vehicles in each category) by 4 for the 2004 model year, 3 for the 2005 model year, 2 for the 2006 model year and 1 for the 2007 model year. The yearly results for PCs/LDT1s shall be summed together to determine a separate cumulative total for PCs/LDT1s and the yearly results for LDT2s shall be summed together to determine a cumulative total for LDT2s. The cumulative total for each category must be equal to or exceed 500 to be considered equivalent. ***Vehicles introduced prior to the 2004 model year shall not be considered in this equation.*** A manufacturer may add vehicles introduced before the 2004 model year (e.g., the percent of vehicles introduced in 2003 would be multiplied by 5) to the cumulative total.

*The new language on the phase-in schedule reflects staff's original intent. The modification regarding the alternative phase-in schedule is proposed to allow manufacturers to gain extra credit for introducing LEV II vehicles prior to the 2004 model year.*

3. Modify title 13, CCR, section 1961(c)(3)(A) and Part I, Section E3.3.1 of the 2001+ LDV/MDV Exhaust TPs as follows:

(A) [or 3.3.1] A manufacturer shall equalize emission debits by earning g/mi NMOG emission credits or VECs in an amount equal to the g/mi NMOG debits or VEDs, or by submitting a commensurate amount of g/mi NMOG credits or VECs to the Executive Officer that were earned previously or acquired from another manufacturer. For 2001 [added in test procedures only] through 2003 and for 2007 and subsequent model years, manufacturers shall equalize emission debits by the end of the following model year. For 2004 through 2006 model years, a manufacturer shall equalize NMOG debits for PCs and LDTs and LEV II MDVs within three model years and prior to the end of the 2007 model year, **and shall equalize VEDs for MDVs by the following model year.** [The rest of the paragraph would be unchanged]

*This modification was inadvertently omitted in the original proposal. It allows LEV II MDVs three model years to equalize VEDs while still allowing LEV I MDVs only one model year to equalize any debits.*

4. Modify title 13, CCR, section 1978(a)(3) as follows (the preexisting regulatory text is shown in normal type, and the second set of modifications now being made available is shown in double underline to indicate additions and ***bold italicized strikeout*** to indicate deletions):

(3) The manufacturer shall adhere to the following phase-in schedule, as determined by projected vehicle sales throughout the United States, with the exception of small volume manufacturers.

<b>ORVR Model Year Phase-In Schedule</b>			
<b>Class of Vehicle</b>	<b>40% Fleet</b>	<b>80% Fleet</b>	<b>100% Fleet</b>
Passenger Cars	1998	1999	2000
Light-Duty Trucks <u>0 - 6,000 lbs. GVWR</u>	2001	2002	2003
<u>Light-Duty Trucks /</u> Medium-Duty Vehicles {6,001-8,500 lbs. GVWR}	2004	2005	2006

*This modification clarifies the phase-in schedule for the refueling emission standards such that the phase-in requirements of medium-duty vehicles will not change as a result of the new LEV II changes in vehicle weight classifications.*

5. Modify sections 2.(b) and 3.5 of the “California Motor Vehicle Emission Control and Smog Index Label Specifications” as follows:

2. **Applicability.**

\* \* \*

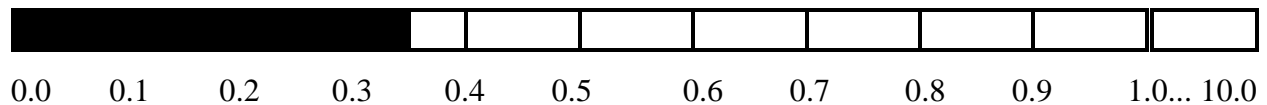
(b) The specifications for smog index labels shall apply to all new passenger cars and light-duty trucks 0-8500 pounds gross vehicle weight. This labeling requirement shall be effective ~~for passenger cars and light-duty trucks 0-5750 lbs. loaded vehicle weight~~ starting with the 1998 model-year ~~and for light-duty trucks 0-8500 pounds gross vehicle weight starting with the 2004 model-year~~.

\* \* \*

**3.5 Smog Index Labels.** A smog index label made of paper or plastic shall be securely affixed in a location specified in section 43200 of the Health and Safety Code. The smog index label shall ~~include~~ display the smog index for the vehicle, as specified in subsection 3.5(a) through 3.5(c), and the fleet average smog index, which shall be referred to as “The Smog Index of the average new vehicle.” Every model-year, the fleet average smog index shall be updated on the smog index label as specified in subsection 3.5(d). The smog index label shall also include information to inform purchasers of the significance of the smog index. ~~This explanatory information~~ The smog index label may shall take the following following form for the 1998 - 2000 model years and the form set forth in Appendix A of this document for the 2001 and subsequent model years. An alternative label may be used if shown to yield equivalent clarity and if approved in advance by the Executive Officer.

The Smog Index of this vehicle is

**0.34**



Note: The Smog Index (SI) indicates the relative level of pollutants emitted by the vehicle. The lower the SI, the lower the vehicle's emissions.

\* \* \* \*

*This modification clarifies that the current smog label will apply for the 1998 through 2000 model years, and the new LEV II smog index label will apply for the 2001 and subsequent model years.*

6. Modify section 3.(b) of the “California Motor Vehicle Emission Control and Smog Index Label Specifications” as follows:

\* \* \* \*

The ninth character of the VEC bar-code label is the code for the emission standard to which the vehicle was certified. This character shall apply to all 1998 and subsequent model passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines. Coding for this character is as follows:

TLEV	A
LEV <u>I</u>	B
<u>LEV II</u>	<u>J</u>
<u>LEV II, Option 1</u>	<u>K</u>
ULEV <u>I</u>	C
<u>ULEV II</u>	<u>P</u>
***	
<u><b>150,000 TLEV</b></u>	<u><b>J</b></u>
***	

*The modifications regarding LEV IIs were inadvertently omitted in the original proposal; they add bar code characters for LEV II vehicles. Since 150,000 TLEV is a LEV II category, it should be deleted as part of the general elimination of the LEV II TLEV category.*

7. Modify title 13, CCR, section 1976(b)(1)(E), and Section I.E.1.(c) of the proposed new “California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles” as follows:

(E) [or (c)] The optional zero-fuel evaporative emission standards for the three-day and two-day diurnal-plus-hot-soak tests are 0.35 grams per test for passenger cars, 0.50 grams per test for light-duty trucks ~~under~~ 6,000 lbs. GVWR and under, and 0.75 grams per test for light-duty trucks from 6,001 to 8,500 lbs. GVWR, to account for vehicle non-fuel evaporative emissions (resulting from paints, upholstery, tires, and other vehicle sources). Vehicles demonstrating compliance with ~~the~~ these evaporative emission standards shall also have zero (0.0) grams of fuel evaporative emissions per test for the three-day and two-day diurnal-plus-hot-soak tests. The “useful life” shall be 15 years or 150,000 miles, whichever occurs first. In lieu of demonstrating compliance with the zero (0.0) grams of fuel evaporative emissions per test over the three-day and two-day diurnal-plus-hot-soak tests, ~~the~~ manufacturer ~~shall~~ may submit for advance Executive Officer approval a test plan to demonstrate that the vehicle has zero (0.0) grams of fuel evaporative emissions throughout its useful life.

*In response to manufacturers' comments during the first 15-day comment period, the provisions on the zero-evaporative fuel standard would be modified to reference the three-day and two-day diurnal-plus-hot-soak tests and to provide that the test plan for useful-life zero fuel demonstration is an option to demonstration of compliance using the three-day and two-day diurnal-plus-hot-soak tests.*

8. Modify Part III, Section D.1. (text following 1.12.) of the "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles" as follows:

**1. General Requirements**

\* \* \* \*

*[After 1.12.]*

The supplemental two-day diurnal sequence in Figure 4 2 (and Figure 5 3A or 3B for hybrid electric vehicles) shall be conducted according to the steps described in ~~(A)~~ 1.1 through ~~(D)~~ 1.4, ~~(F)~~, ~~(G)~~ 1.6, 1.7, followed by ~~(J)~~ 1.10 through ~~(L)~~ 1.12 of this paragraph except that the ambient temperature of the hot soak test is conducted at an ambient temperature between 68°F and 86°F at all times and that the diurnal test will consist of a two-day test. Emission sampling is not required for the standard cold start test and hot start test (standard three phase test) in the supplemental two-day diurnal sequence as shown in Figure 3A.

*This modification amends the exhaust testing requirements during the supplemental two-day diurnal evaporative test sequence for hybrid electric vehicles to further clarify that emission sampling is not required for the cold start test and the hot start test.*