

APPENDIX C

SUMMARY OF PROPOSED MINOR AMENDMENTS

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A. Summary of Proposed Modifications to §1961, title 13, CCR and to the “California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles”

The proposed regulatory language setting forth the criteria for certifying certain cleaner federally-certified vehicles in California is contained in Appendix A of this Staff Report. The proposed modifications to subparagraphs (a)(14) and (b)(1)(B)3 amend the California LEV II program standards to allow a manufacturer to certify a cleaner federal vehicle in California (see the Staff Report for a full description on the proposed modification). The certification requirements for these cleaner vehicles are set forth in Section H of the “California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles (hereinafter LDV/MDV TPs),” which is set forth below (in italics for clarity).

1.4 Certification of a Federal Vehicle in California. *Whenever a manufacturer federally-certifies a 2004 or subsequent model-year passenger car, light-duty truck or medium-duty vehicle model to the standards for a particular emissions bin that are more stringent than the standards for an applicable California vehicle emissions category, the equivalent California model may only be certified to (i) the California standards for a vehicle emissions category that are at least as stringent as the standards for the corresponding federal emissions bin, or (ii) the exhaust emission standards to which the federal model is certified. However, where the federal exhaust emission standards for the particular emissions bin and the California standards for a vehicle emissions category are equally stringent, the California model may only be certified to either the California standards for that vehicle emissions category or more stringent California standards. The federal emission bins are those contained Tables S04-1 and S04-2 of 40 CFR section 86.1811-04(c) as adopted February 10, 2000. A California vehicle model is to be treated as equivalent to a federal vehicle model if all of the following characteristics are identical:*

- (a) Vehicle make and model;
- (b) Cylinder block configuration (e.g., L-6, V-8);
- (c) Displacement;
- (d) Combustion cycle; and
- (e) Transmission class.

The comparative stringency of the standards for the federal exhaust emissions bin and for the California vehicle emissions category shall be based on a comparison of the sum of the 100,000, 120,000, or 150,000 mile standards for NMOG and NOx.

1.4.1 If a federally-certified vehicle model is certified in California in accordance with subparagraph 1.4, the model shall be subject to the federal requirements for exhaust emissions, SFTP emissions, cold CO emissions and highway NOx. The vehicle model shall be subject to all other California requirements including evaporative emissions, OBD II, and emissions warranty.

1.4.2 Prior to certification of a 2004 or subsequent model-year vehicle, a manufacturer must submit information sufficient to enable the Executive Officer to determine whether there is a federally-certified vehicle model for that model year that is equivalent to the California vehicle model based on the criteria listed in subparagraph 1.4.

1.4.3 If the Executive Officer determines that there is a federally-certified vehicle model for that model year that is equivalent to the California vehicle model, the following information shall be submitted with the Part I or Part II Application for Certification as set forth below:

(a) Part I Application for Certification: (i) Evidence of federal certification including, but not limited to, federal certification exhaust emission levels and compliance with federal SFTP, cold CO and highway NOx emission levels; and (ii) evidence of compliance with California evaporative emission requirements and California OBD II requirements.

(b) Part II Application for Certification: evidence of a warranty on emission-related parts in accordance with sections 2035 et seq., title 13 CCR as they apply to vehicles certified under the primary California standard.

1.4.4 For purposes of meeting the California NMOG fleet average phase-in requirements or for determining vehicle equivalent credits, the applicable California NMOG value for passenger cars and light-duty trucks or vehicle equivalent credits for medium-duty vehicles shall be determined as follows:

(a) The sum of the federal full useful life (100,000, 120,000 or 150,000) NMOG and NOx value shall be compared with the next less stringent California full useful life NMOG plus NOx value to determine which emission category (e.g., LEV, ULEV or SULEV) is to be used for the fleet average value or vehicle equivalent credit calculation.

(b) For passenger cars and light-duty trucks, once the equivalent California emission category is determined (e.g., whether the vehicle is considered a LEV, ULEV or SULEV), the applicable NMOG value to be used in the fleet average calculation is set forth in the table in section E.2.1.2 of these test procedures for passenger cars and light-duty trucks. For example, if the full useful life (120,000 miles) NMOG plus NOx standard to which the federal vehicle is certified is 0.110 grams per mile, that vehicle would be considered a LEV II ULEV for fleet average purposes because the combined LEV full useful life NMOG plus NOx value is 0.125 and is the next less stringent emission category. The applicable emission standard to be used in the fleet average calculation would therefore be 0.040 grams per mile.

1.4.5 The vehicle shall be subject to the federal in-use requirements and the emission standard applicable for in-use compliance purposes shall be the federal standard to which the vehicle was federally-certified.

1.4.6 The tune label shall meet the federal requirements applicable to such a vehicle with an additional sentence which reads: "This vehicle conforms to federal regulations and is certified for sale in California." The value used in the smog index label shall be the California emission category to which the vehicle was deemed certified

for fleet average NMOG purposes.

In addition to the requirements for cleaner federal vehicles, there are several proposed minor amendments to the LEV II provisions to correct errors and update the certification language consistent with the Tier 2 requirements in keeping with the CAP 2000 harmonization process that began several years ago more closely aligning the U.S. EPA and California certification requirements to reduce the compliance burden on a manufacturer. The proposed modifications to subparagraph (b)(1)(B)1 amend the existing language for the fleet average NMOG calculation to clarify that there are two calculations -- one for passenger cars and light-duty trucks (0-3750 pounds loaded vehicle weight (LVW)) and another for light-duty trucks from 3751 pounds LVW to 8,500 pounds gross vehicle weight. Staff is also proposing a clarification to the implementation requirements for medium-duty vehicles that specifies that a manufacturer must certify at least one test group per model year to the LEV II standards.

Amendments to subsection 1961(b)(C) eliminate unintended instances where phase-in requirements for small volume manufacturers are more stringent than those for other manufacturers. As with LEV I, small volume manufacturers of passenger cars and light-duty trucks would be allowed to delay implementation until the end of the phase-in years in model year 2007. During the 2004-2006 model years, small volume manufacturers of these vehicles would be subject to the preexisting LEV I requirements. In the case of medium-duty vehicles, small volume manufacturers would be able to market vehicles subject to the MDV Tier 1 standards through the 2003 model year; starting with the 2004 model year, they would have to be certified to the MDV LEV standards in a quantity equivalent to 100 percent of its MDV fleet. During the 2004-2006 model years, the medium-duty vehicle could be certified to the LEV I LEV standards (or the equivalent using vehicle emission credits). Starting in the 2007 model years, they could only be certified to the LEV II standards or the equivalent.

Subsequent to the adoption of the LEV II program, U.S. EPA adopted the federal Tier 2 standards which incorporate substantial portions of the LEV II program. The majority of the modifications in the California test procedures update the California provisions to align with the Code of Federal Regulations.

Finally, staff is proposing a correction to the LEV I NMOG and formaldehyde standards at 50°F. The values in the current table double the 120,000 mile standard rather than the 50,000 mile standard as set forth in the original LEV I proposal.

**B. Summary of Proposed Modifications to §1956.8, Title 13, CCR and to the
“California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent
Model Heavy-Duty Otto-Cycle Engines”**

The proposed addition of subparagraph (c)(1)(ii) amends the medium- and heavy-duty Otto-cycle (gasoline) engine exhaust emission standards to align with the recently promulgated federal exhaust emission standard of 1.0 gram per brake horsepower-hour non-methane hydrocarbons plus oxides of nitrogen. The test of the proposed modification is in Appendix A to this staff report.

In addition, staff is proposing a reorganization of the test procedures that govern the certification of medium- and heavy-duty Otto-cycle engines. These modifications follow the approach used in the earlier revisions to the test procedures for light- and medium-duty vehicles, tracking the organizational structure of the federal certification procedures to make it easier for manufacturers to compare them. Part I contains the requirements for certification (40 CFR Subpart A) and Part II contains the engine test procedures (40 CFR Subparts N and P and Appendices I and XII). The new test procedures would apply to 2004 and subsequent model year engines, and the existing test procedures would sunset after the 2003 model year.

In the current version of the test procedures, reference is made to a specific Code of Federal Regulation (CFR) section in the text. If the section is applicable to several model years, all the CFR sections are listed. In the new test procedures, if a CFR section for a specific model year is set forth and that section references previous CFR sections, then all previously referenced CFR sections are deemed to be incorporated unless otherwise noted. Thus, if §86.098-10 is the governing section, and that section references previous sections, those previous sections are deemed incorporated in the California test procedures. In order to facilitate a comparison of these test procedures to the 1987 and subsequent heavy-duty Otto-cycle test procedures, only the proposed regulatory modifications and any language that differs from the 1987 version have been indicated in underline and ~~strikeout~~. Please note that some of the text indicated by ~~strikeout~~ has been deleted because the exact requirement is set forth in the corresponding CFR section so that inclusion in these test procedures would be redundant.

In some cases there are several entries for the same section of the CFR (e.g., for different model years). For this reason, the generic notation §86.xxx-#, is used followed by the appropriate reference. For example, §86.xxx-1 is used in the title and §86.001-1 and §86.005-1 are used in the text.

The CFR sections referenced in Part II of the Test Procedures have also been updated. Under the new numbering proposal, previous sections of the CFR are no longer listed but still apply if referenced in the most current CFR section. In addition, the fuel specifications language has been reorganized and updated consistent with the language contained in the light- and medium-duty test procedures.

