

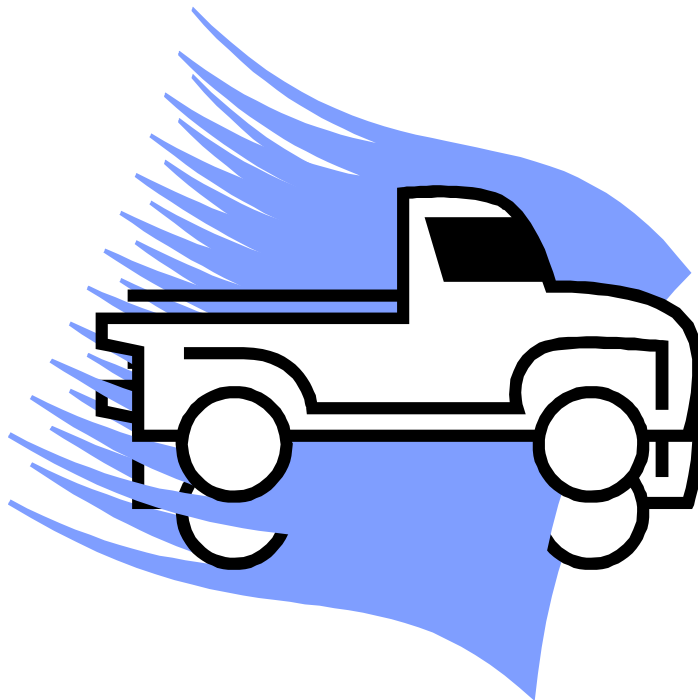
State of California
Environmental Protection Agency

AIR RESOURCES BOARD

PROPOSAL TO REQUIRE CERTAIN CALIFORNIA LIGHT- AND
MEDIUM-DUTY VEHICLES TO BE SUBJECT TO FEDERAL TIER 2
EXHAUST STANDARDS, AND TO ADOPT ADDITIONAL EXHAUST
EMISSION STANDARDS FOR HEAVY-DUTY GASOLINE VEHICLES
AND ENGINES

FINAL STATEMENT OF REASONS

January 2001



Mobile Source Control Division
9528 Telstar Avenue
El Monte, California 91731

State of California
California Environmental Protection Agency
AIR RESOURCES BOARD

**Final Statement of Reasons for Rulemaking
Including Summary of Comments and Agency Response**

PUBLIC HEARING TO CONSIDER REQUIRING CERTAIN CALIFORNIA LIGHT- AND MEDIUM-DUTY VEHICLES TO BE SUBJECT TO FEDERAL TIER 2 EXHAUST STANDARDS, AND ADOPTING ADDITIONAL EXHAUST EMISSION STANDARDS FOR HEAVY-DUTY GASOLINE VEHICLES AND ENGINES

Public Hearing Date: December 7, 2000
Agenda Item No: 00-12-3

I. GENERAL

In this rulemaking, the Air Resources Board (ARB or Board) is adopting amendments to the Low-Emission Vehicle II (LEV II) regulations, along with amendments to its standards for heavy-duty Otto-cycle engines. These amendments include the following primary elements:

Incorporation of portions of the recently promulgated federal Tier 2 program into the California LEV II exhaust emissions requirements for light- and medium-duty vehicles by requiring manufacturers to sell federally-certified vehicle models in California in those instances where the federal model is certified to exhaust emission standards that are more stringent than the California standards to which the equivalent California model would otherwise be certified;

Providing that federally-certified vehicles approved for sale in California will have to meet California requirements for evaporative emissions and on-board diagnostics; and

Alignment of California exhaust emission standards for heavy-duty Otto-cycle engines with the recently promulgated federal requirements.

The rulemaking was initiated by the October 20, 2000 publication of a notice for a December 7, 2000 public hearing to consider the proposed amendments. A Staff Report (Initial Statement of Reasons) was also made available for public review and comment starting October 20, 2000. The Staff Report, which is incorporated by reference herein, describes the rationale for the proposal. The text of the proposed amendments to title 13, California Code of Regulations (CCR) sections 1961 and 1956.8 was included as an Appendix to the Staff Report. These documents were also posted on the ARB's Internet site for the rulemaking at:

<http://www.arb.ca.gov/regact/mdv-hdge/mdv-hdge.htm>. Also posted on the internet site were proposed amendments to the "California Exhaust Emission Standards and Test

Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," which is incorporated by reference in section 1961(d), proposed amendments to the "California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles," which is incorporated by reference in section 1956.8(d), and the new "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles," proposed to be incorporated by section 1956.8(d).

On December 7, 2000, the Board conducted the public hearing. There were no written or oral comments from the public. At the conclusion of the hearing, the Board adopted Resolution 00-45, in which it approved the originally proposed amendments with several modifications to the proposed CCR text and the text of the incorporated documents. The approved modifications will allow manufacturers to sell qualifying federally-certified vehicles prior to the 2004 model year, allow 2004 and earlier model year federal heavy light-duty trucks and medium-duty passenger vehicles covered by the program to certify to federal evaporative emissions and on-board diagnostics requirements, delete the requirement that a federally-certified vehicle model be marketed in California when the otherwise comparable California model uses a different aspiration method or fuel, provide manufacturers with credit for the additional emission benefits achieved by federally certifying vehicles to optional 150,000-mile emission standards, and make various nonsubstantive corrections. These modifications to the original proposal provide additional flexibility, help assure adequate lead time, and improve the characterization of equivalent models.

All of these modifications had been suggested by staff in a 19-page document entitled "Staff's Suggested Modifications to the Original Proposal" that was distributed at the hearing and was Attachment E to the Resolution. The proposed modifications were largely based on informal comments that had been made to the staff by interested parties.¹ In accordance with section 11346.8 of the Government Code, the resolution directed the Executive Officer to incorporate the modifications into the proposed regulatory texts, with such other conforming modifications as may be appropriate, and to make the modified text available for a supplemental comment period of at least 15 days. He was then directed either to adopt the amendments with such additional modifications as may be appropriate in light of the comments received, or to present the regulations to the Board for further consideration if warranted in light of the comments.

The text of the substantive modifications to the originally proposed regulations and incorporated documents were made available for a supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text." This Notice, a copy of Resolution 00-45 and the document entitled "Staff's Suggested Modifications to the Original Proposal" were mailed on December 8, 2000 to all parties identified in section 44(a), title 1, CCR, and to other persons generally interested in the ARB's

¹ The staff conducted an informal workshop with interested parties on November 15, 2000. Participants understood that comments made to staff at the workshop would not be treated as formal rulemaking comments for presentation to the Board.

rulemakings concerning motor vehicle emissions standards. Along with the modifications to the incorporated documents being set forth in Attachment E to the resolution, the Notice of Public Availability of Modified Text” stated that the complete texts of the three incorporated documents, with all of the modifications clearly indicated, were available on the ARB’s Internet site for the rulemaking. The complete modified texts were posted on the Internet site December 8, 2000. The 15-day notice also identified a staff contact person from whom the complete texts could be obtained.

One comment was received during the 15-day comment period. After considering this comment, on December 27, 2000 the Executive Officer issued Executive Order G-00-069, adopting the amendments to CCR, title 13, and amending or adopting the incorporated documents.²

This Final Statement of Reasons (FSOR) updates the Staff Report by identifying and providing the rationale for the modifications made to the originally proposed regulatory texts. The FSOR also contains a summary of the comment the Board received on the proposed regulatory amendments during the formal rulemaking process and the ARB’s responses to that comment.

Incorporation of Test Procedures and Federal Regulations. The three amended and new test procedures are incorporated by reference in CCR, title 13, sections 1956.8(d) and 1961(d). These test procedure documents in turn incorporate certification test procedures adopted by the U.S. Environmental Protection Agency (U.S. EPA) and contained in 40 Code of Federal Regulations (CFR) Part 86.

California Code of Regulations, title 13, sections 1956.8(d) and 1961(d) identify the incorporated ARB documents by title and date. The ARB documents are readily available from the ARB upon request and were made available in the context of this rulemaking in the manner specified in Government Code section 11346.5(b). The CFR is published by the Office of the Federal Registrar, National Archives and Records Administration, and is therefore reasonably available to the affected public from a commonly known source.

The test procedures are incorporated by reference because it would be impractical to print them in the CCR. Existing ARB administrative practice has been to have the test procedures incorporated by reference rather than printed in the CCR as these procedures are highly technical and complex. They include the “nuts and bolts” engineering protocols required for certification of motor vehicles and have a very limited audience. Because the ARB has never printed complete test procedures in the CCR, the affected public is accustomed to the incorporation format. The ARB’s test procedures as a whole are extensive and it would be both cumbersome and expensive

² As adopted, the amendments included corrections to the numbering system in section 1956.8(c)(1) and (h); nonsubstantive editorial corrections to footnote G in the table in section 1956.8(c)(1)(A), changing “CCR” to “CFR” and changing a period to a comma; and nonsubstantive editorial clarifications to the formulas in section 1961(b)(1)(B)1.a. and b., placing parentheses around the numerators to make clear that everything preceding the division sign is in the numerator.

to print these lengthy, technically complex procedures with a limited audience in the CCR. Printing portions of the ARB's test procedures that are incorporated by reference would be unnecessarily confusing to the affected public.

The test procedures incorporate portions of the CFR because the ARB requirements are substantially based on the federal emission regulations. Manufacturers typically certify vehicles and engines to a version of the federal emission standards and test procedures which has been modified by state requirements. Incorporation of the federal regulations by reference makes it easier for manufacturers to know when the two sets of requirements are identical and when they differ. Each of the incorporated CFR provisions are identified by date in the ARB test procedure documents.

Fiscal Impacts. The Board has determined that this regulatory action will not result in a mandate to any local agency or school district the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

Consideration of Alternatives. The amendments proposed in this rulemaking were the subject of discussions and a workshop involving staff and the affected motor vehicle manufacturers. The Board has determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

II. MODIFICATIONS TO THE ORIGINAL PROPOSAL

A. AN OVERVIEW OF THE ORIGINAL REGULATIONS

1. The Existing California Motor Vehicle Emission Regulations

(a) The LEV Regulations

In 1990, the ARB adopted the Low-Emission Vehicle (or LEV I) program, which significantly reduces exhaust emissions from the light- and medium-duty vehicle fleet between 1994 and 2003. Both the LEV I regulations, and the second phase of these regulations (LEV II) adopted in November 1998, include three primary elements. The first element consists of tiers of exhaust emission standards for increasingly more stringent categories of low-emission vehicles. The second is a mechanism requiring each manufacturer to phase-in a progressively cleaner mix of vehicles from year to year with the option of credit banking and trading. And the third is a requirement that a specified percentage of passenger cars and lighter light-duty trucks be ZEVs, vehicles with no emissions of any criteria pollutant or precursor.

(i) *LEV II standards*

The LEV II program will continue to reduce emissions from the new vehicle fleet between 2004 and 2010. A major focus of the LEV II program is to reduce emissions from the largest sport utility vehicles and pickup trucks (up to 8,500 pounds gross vehicle weight (GVW)) that are being used primarily for personal transportation, by requiring them to meet the same emission standards as passenger cars. The four categories of low-emission vehicle to which these vehicles may be certified are (in order of increasing stringency) low-emission vehicle (LEV), ultra-low-emission vehicle (ULEV), super-ultra-low-emission vehicle (SULEV) and zero-emission vehicle (ZEV). The transitional low-emission vehicle (TLEV) category, which contains less stringent standards than the LEV category and was available under LEV I, was dropped under LEV II. LEV II also lowers the emission standards for all vehicle categories compared with LEV I.

(ii) *Requirements for phasing-in a cleaner vehicle fleet*

Under both the LEV I and LEV II programs, each year a manufacturer may produce any combination of passenger cars and light-light-duty trucks certified to any combination of emission categories, provided its full model line meets an increasingly stringent non-methane organic gas (NMOG) fleet average requirement. Emissions from heavier light-duty trucks are similarly reduced. With the adoption of the LEV II program, all former heavier light-duty trucks and all former medium-duty vehicles having a GVW of less than 8,500 pounds will be included in this second fleet average requirement. Medium-duty vehicles greater than 8,500 pounds GVW have separate requirements based on a percent phase-in schedule under LEV II.

(iii) *ZEV requirements*

As originally adopted, the Low-Emission Vehicle regulations required that specified percentages of the passenger cars and lightest light-duty trucks produced by each of the seven largest manufacturers be ZEVs, starting in 1998. The percentages were 2 percent for the 1998-2000 model years and 5 percent for the 2001-2002 model years. A requirement of 10 percent ZEVs applied to all but small-volume manufacturers starting in model year 2003. In 1996, the Board eliminated the regulatory ZEV requirements applicable prior to the 2003 model year. The ZEV element also includes a marketable credits system.

(b) Heavy-Duty Otto-Cycle (Gasoline) Engine Standards

A heavy-duty Otto-cycle engine is one used in a gasoline vehicle over 8,500 pounds GVWR that does not come directly from the factory fully assembled. Federal regulations treat all heavy-duty engines as one category over 8,500 pounds GVWR. However, California regulations divide these engines into two categories – one for engines used in incomplete medium-duty gasoline vehicles 8,501 to 14,000 pounds GVWR and another for engines used in all gasoline vehicles over 14,000 pounds

GVWR. For the 2004 and subsequent model years, the California non-methane hydrocarbon (NMHC) plus oxides of nitrogen (NOx) standards for medium-duty ULEVs and for heavy-duty Otto-cycle engines are either 2.4 grams per brake-horsepower hour (g/bhp-hr) or 2.5 g/bhp-hr with a 0.5 g/bhp-hr cap. The SULEV NMHC plus NOx standard for medium-duty engines is 2.0 g/bhp-hr.

2. **The Existing Federal Motor Vehicle Regulations**

(a) Tier 2 Regulations

Subsequent to the adoption of the LEV II program, ARB staff assisted the U.S. EPA in developing a similar program for federal vehicles that would achieve maximum emission reductions for vehicles in other states. The program that was subsequently adopted by the U.S. EPA is referred to as the Tier 2 program.

While Tier 2 was patterned after the LEV II program, it contains some unique features and program elements that differ from the California program. These include establishing eleven different emissions standard “bins” for cars and light-duty trucks that function in the same manner as the vehicle categories (such as LEV or ULEV) in the California program. Tier 2 also sets a NOx fleet average requirement rather than an NMOG fleet average requirement as in California. This was done primarily to allow diesel sport utility vehicles and pickup trucks to emit at higher emission levels than passenger vehicles so they could continue to be sold. Tier 2 requires that their emissions be offset by lower emissions from other vehicles. The need to offset high diesel vehicle emissions may result in manufacturers reducing the emissions from some federal Tier 2 vehicles ahead of the schedule required by LEV II. Since diesels are not provided special standards in California, manufacturers would not otherwise need to sell the cleaner vehicles here. The Tier 2 standards generally apply starting with the 2004 model year, although manufacturers can generate credits with cleaner vehicles produced before the 2004 model year.

(b) Federal Heavy-Duty Otto-Cycle Engine Standards

On July 31, 2000, the U.S. EPA adopted new regulations that lower the federal standards for NMHC plus NOx emissions from heavy-duty Otto-cycle engines from 4.0 g/bhp-hr to 1.0 g/bhp-hr for the 2005 and subsequent model years. These regulations were developed through a cooperative effort between ARB and U.S. EPA as the result of a 1994 Settlement Agreement with environmental groups.

While the primary new standard for federal heavy-duty Otto-cycle engines is 1.0 g/bhp-hr NMHC plus NOx, applicable in the 2005 and subsequent model years, the federal rule also provides two other compliance options in addition to the primary one. The other two options allow manufacturers to delay compliance with this standard by certifying to an interim emission level earlier than under the primary requirement but at a less stringent level of 1.5 g/bhp-hr. These three compliance options allow a manufacturer to select the best approach for its product line. The primary standard was

designated “Option 3” by U.S. EPA. Another option – Option 1 – requires heavy-duty Otto-cycle engines to be certified to an NMHC plus NOx standard of 1.5 g/bhp-hr in 2003 and delays compliance with the 1.0 g/bhp-hr standard until 2008. Option 2 requires the certification of heavy-duty Otto-cycle engines to a 1.5 g/bhp-hr NMHC plus NOx standard in 2004 and delays compliance with the 1.0 g/bhp-hr standard until 2008. A manufacturer choosing to certify its engines to either Option 1 or Option 2 would also be required to comply with additional requirements to reduce emissions from chassis-certified vehicles, on-board diagnostics requirements for vehicles 8,501 to 14,000 pounds GVWR, and on-board refueling vapor recovery requirements.

B. THE PROPOSED AMENDMENTS

1. LEV II Portion of the Proposal

This proposal changes the LEV II regulations to require that, beginning with the 2004 model year, a manufacturer may not certify a California vehicle to a less stringent standard than its federal counterpart. In cases where a vehicle model is certified to federal emission standards that are identical to California standards, the manufacturer must certify that model to the California emission standards. However, if a federal model is certified to more stringent standards than the California standards to which the equivalent California model would otherwise be certified, the federal model must be sold in California as well. In such circumstances, the model sold in California would also be required to comply with California evaporative, on-board diagnostics II, warranty and label requirements. A federal model certified to Tier 2 standards that do not correspond to a California emission category would be counted as certified to the next highest California emission category (based on a comparison of hydrocarbons plus NOx) for the purpose of determining compliance with the NMOG fleet average requirements, calculating vehicle emission credits, and compliance with phase-in requirements.

2. Heavy-Duty Otto-Cycle Engine Portion of the Proposal

This proposal harmonizes California's heavy-duty Otto-cycle regulations with the more stringent emission standards now being required for federally-certified engines. In California, these new standards will apply to Otto-cycle engines used both in medium-duty vehicles 8,501 to 14,000 pounds GVWR and heavy-duty vehicles greater than 14,000 pounds GVWR. The California proposal includes adoption of all three federal compliance options to allow manufacturers that choose to certify to Options 1 or 2 federally to do the same for California. However, it does not include other federal requirements to reduce emissions from chassis-certified vehicles, on-board diagnostics requirements, or on-board refueling vapor recovery. California already has stringent exhaust emission standards for complete (chassis-certified) vehicles, and on-board diagnostics II systems and on-board refueling vapor recovery controls are already required as well.

C. MODIFICATIONS TO THE ORIGINAL PROPOSAL

1. LEV II Portion of the Proposal

The adopted amendments contain a few substantive modifications to the originally proposed regulatory text. However, most of the modifications were nonsubstantive. The substantive modifications are listed below. The rationales for all modifications are contained in the “Staff’s Suggested Modifications to the Original Proposal,” which is attached to this FSOR.

(a) Exception for Clean Fuel Fleet Vehicles This modification exempts vehicles produced in limited numbers by manufacturers and only marketed to fleet operators that are subject to federal clean fuel fleet requirements from being required for sale in California. Since such a federal model is not intended for broad distribution outside the state, it appropriately should not be required to be the primary model marketed in California.

(b) Opt-In for 2003 or Prior Model Year Vehicles This modification allows a manufacturer to certify a federal passenger car, light-duty truck or medium-duty vehicle in California that is cleaner than its California counterpart earlier than the originally proposed (2004 model year) timeframe. If manufacturers wish to market these cleaner models in California, they should be permitted to do so.

(c) Credit for Vehicles Certifying to 150,000-mile Emission Standards This modification provides manufacturers with credit for the additional emission benefits achieved by certifying vehicles to optional 150,000-mile emission standards rather than the 120,000-mile requirements for the purpose of calculating the NMOG fleet average. The original proposal did not address this situation, and it is appropriate to account for the longer warranty period.

(d) Definition of Equivalent Vehicle Model The original proposal stated that a California vehicle model is to be treated as equivalent to a federal model if all of the following characteristics are identical: vehicle make and model; cylinder block configuration (e.g., L-6, V-8); displacement, combustion cycle; and transmission class. This amendment adds aspiration method (e.g., naturally aspirated, turbocharged) and fuel (e.g., gasoline, natural gas, methanol) to the list of criteria for determining model equivalency. These criteria have been added so as not to unnecessarily and unreasonably restrict the types of vehicles that can be sold in California.

(e) Additional Lead Time Provided for Federal Vehicles Greater than 6,000 pounds GVWR to Meet California Requirements This amendment allows Tier 2 vehicles greater than 6,000 pounds that are sold in California prior to the 2005 model year to meet federal, rather than California, evaporative emissions and on-board diagnostics requirements.

2. Heavy-Duty Otto-Cycle Engine Portion of the Proposal

Only two substantive modifications were made to the originally proposed heavy-duty Otto-cycle engine amendments; nonsubstantive corrections are explained in the Attachment.

(a) Addition of Option 1 and 2 Standards for Heavy-Duty Otto-Cycle Engines
This modification allows a manufacturer that chooses to certify its engines to Option 1 or Option 2 standards federally to also certify California engines to those optional standards.

(b) Removal of the LEV Emission Category for Heavy-Duty Otto-Cycle Engines Used in Incomplete Medium-Duty Vehicles
The original proposal erroneously reintroduced a LEV emission category and standards for heavy-duty Otto-cycle engines used in incomplete medium-duty vehicles 8,501 to 14,000 pounds GVWR. This modification eliminates this emission category and set of standards.

III. SUMMARY OF COMMENTS AND AGENCY RESPONSES

The Board did not receive any comments in connection with the December 7, 2000 hearing. One comment letter was received during the 15-day comment period.

1. Comment: The modification to Part I, Section H.1.4.1 of the “California Exhaust Emission Standards for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles” provides that where a federally-certified vehicle model is required to be sold in California because it is cleaner than the equivalent California vehicle that would otherwise be certified, the federal model does not have to be subject to California requirements for evaporative emissions and OBD II until the 2005 model year. Before that time, the manufacturer may opt to have the vehicle subject to the federal requirements for evaporative emissions and OBD II. While staff asserts that this modification is designed to provide 4-years lead time for these vehicles, it only provides 3-years lead time, and accordingly does not comply with the federal Clean Air Act (CAA).

Clean Air Act section 202(a)(3)(C) (42 U.S.C. § 7521(a)(3)(C)) states:

“LEAD TIME AND STABILITY.— Any standard promulgated or revised under this paragraph and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no later than the model year commencing 4 years after such revised standard is promulgated.”

Section 202(b)(3)(C)) (42 U.S.C. § 7521(b)(B)(3)(C)) provides that for purposes of section 202 and other provisions in Title II of the CAA, the term “heavy-duty vehicle” generally includes vehicles having a GVW in excess of 6,000 lbs. The 4-year lead time requirement applies to ARB regulations because California must obtain a waiver of

preemption under CAA section 209(b) (42 U.S.C. § 7543(b)) and that section directs U.S. EPA to deny a waiver if the California standards are not consistent with CAA section 202(a), which contains the 4-year lead time requirement.

The proposed ARB provisions on new standards and test procedures are intended by the staff to be in effect at the beginning of the 2005 model year. These proposed new standards are in direct conflict with the requirements of section 202(a)(3)(C) of the CAA, which requires 4 years lead time *after* the model year in which those standards are promulgated. A model year is defined by the EPA and ARB as any period of time starting with January 2nd of the preceding year and ending with December 31 of that model year, but includes only one January 1st for which the model year is named. (See 40 CFR § 86.082-2; Cal. Health and Safety Code § 39038.) The ARB's proposal would subject manufacturers of vehicles over 6000 lbs. GVWR to new requirements in model year 2005, the model year that occurs only three years later than the model year after the current model year. Under the provisions of the CAA, the ARB's proposal fails to meet the four-year lead time requirements section 203(a)(3)(C) and must be withdrawn or modified to conform with the limitations of the Clean Air Act.

Discussions with the Board's Office of Legal Affairs indicate that the Board is relying on the decision in NRDC v. Thomas, 805 F2d 410 (D.C. Cir. 1986) and some related EPA waiver decisions. Unfortunately, the Office of Legal Affairs and EPA, in its waiver decisions, misconstrue the NRDC case. In the NRDC case EPA attempted to improperly narrow the lead time requirement because its rulemaking was significantly delayed. In that case, EPA attempted to impose a 1988 model year effective date on a regulation promulgated on March 15, 1985 during the 1985 model year. The court ruled that the 4-year lead time requirement dictated a 1990 model year effective date. Thus promulgated in the 1985 model year, the 4-year lead time requirement dictated that the rule could not become effective in model years 1986-1989 and could only become effective in the 1990 model year. As a result, the NRDC decision clearly dictates that the 2006 model year is the earliest model year in which the proposed provision can become effective. The Test Procedure provision quoted above should accordingly be modified to allow certification to all federal standards for any 2005 or earlier model year vehicle in the federal heavy light-duty truck or medium-duty passenger vehicle classes. (DaimlerChrysler)

Agency Response. First, although we chose to extend the lead time requirements for vehicles meeting the CAA definition of "heavy-duty," we do not believe that conformance with the federal 4-year lead time requirement is required for California to qualify for a waiver of preemption. Second, if the 4-year lead time requirement *were* to apply, it is satisfied by the adopted regulations.

Applicability of the lead time requirement. Since 1970, U.S. EPA has typically applied a "2-pronged" test of whether California standards are consistent with CAA section 202(a) as required by section 209(b)(1)(C). The standards first must be technologically feasible in the lead time provided considering the cost of compliance,

and second must be compatible with the federal test procedures so that a single vehicle could be subjected to both tests. No more should be required.

This is in accord with the legislative history of section 209. When the California waiver provisions and the “consistent with section 202(a)” language were first placed in the CAA in 1965, section 202(a) consisted of just one sentence requiring adequate lead time in consideration of technological feasibility and economic costs. In the 1977 CAA amendments, Congress amended section 209 “to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare.” (H. R. Rep. No. 294, 95th Cong., 1st Sess. 301 (1977), reprinted in 4 Leg. Hist. at 2768.) At the same time, Congress expanded section 202(a) to add several directives to U.S. EPA regarding its adoption of emission standards, including the 4-year lead time requirement for heavy-duty vehicles. Given Congress’s expressed intent to *strengthen* the waiver provisions, it is unlikely Congress intended to apply the specific 4-year requirement to California.

American Motors Corporation v. Blum, 630 F.2d 978 (D.C. Cir. 1979), vacated U.S. EPA’s waiver of preemption for California standards for light-duty vehicles manufactured by small volume manufacturers, holding that a small volume manufacturer lead time requirement for the 1981 and 1982 model years in CAA section 202(b)(B) was determinative of technological feasibility. But that CAA provision was highly specific, and there is no comparable legislative history for section 202(a)(3)(C). Thus Blum does not mandate a contrary result. We recognize that in its September 9, 1994 Medium-Duty Waiver Decision Document (announced at 59 F.R. 48625 (September 22, 1994)), U.S. EPA stated that the ARB must give the 4-years lead time required under CAA section 202(a)(3)(C). However, that position was dictum – the agency did not need to reach that issue because as discussed below it concluded that 4-years lead time in any event *had been provided* by the ARB.

Calculating the 4-year period. As noted above, the Executive Order adopting the amendments was signed December 27, 2000, and this accordingly is the date of adoption. The federal 4-year lead time requirement runs from the date the regulations are promulgated. If the requirement were to be applied to California regulations, it would run from the date of adoption, which is the state analogue to federal promulgation. This was the conclusion reached by U.S. EPA in the 1994 Medium-Duty Waiver decision. At that time, U.S. EPA relied on various earlier waiver decisions concluding that lead time starts the date the ARB adopts the regulations. Manufacturers are aware from the time of California adoption what the requirements will be and when they will be effective. Indeed, we understand the commenter to implicitly acknowledge that December 27, 2000 is the appropriate date from which to calculate lead time.

We agree with the commenter that the NRDC court held that a federal standard promulgated on March 15, 1985 could become applicable no earlier than the 1990 model year under the 4-year requirement. (805 F.2d 410, 434-437.) Given the definition of “model year” noted by the commenter, there would be no difference in NRDC if the

standard had been promulgated December 27, 1985 – it could still become applicable in the 1990 model year but not before. The commenter characterizes the NRDC rule as having been adopted in the 1985 model year, even though for some vehicles the 1986 model year could have started as early as January 2, 1985. A rule promulgated December 27, 1985 would still have been promulgated in the 1985 model year. On both March 15 and December 27, 1985, a manufacturer could have been marketing either 1985 or 1986 model-year vehicles, and there is no model year that could have been marketed on December 27, 1985 that could not have been marketed March 15, 1985. It thus follows that the ARB amendments adopted December 27, 2000 can become applicable with the 2005 model year. This is wholly consistent with the NRDC decision and with U.S. EPA's September 1994 Medium-Duty Waiver determination, which concluded that 4-years lead time was provided when ARB on December 26, 1990, adopted standards that became applicable with the 1995 model year.