February 17, 2010

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Sir or Madam:

Enclosed are comments from the Association of International Automobile Manufacturers, Inc. (AIAM)[1] on the California Air Resources Board's proposal to adopt the second phase amendments to its motor vehicle greenhouse gas emissions standards for the 2012 to 2016 model years. The express purpose of these amendments is to align the California program with the federal program under development by the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration.

If you have any questions on our comments, please feel free to contact John Cabaniss, Director of Environment and Energy for AIAM at jcabaniss@aiam.org or (703- 247-2107).

Sincerely yours,

Michael J. Stanton
President and CEO

cc: Mary Nichols, CARB
James Goldstene, CARB
Tom Cackette, CARB
Bob Cross, CARB
Steve Albu, CARB
Paul Hughes

[1] The Association of International Automobile Manufacturers (AIAM) represents 15 international motor vehicle manufacturers which account for over 50 percent of all light duty motor vehicles sold in California. AIAM's members include Aston Martin Lagonda, Ferrari, Honda, Hyundai, Isuzu, Kia, Mahindra, Maserati, McLaren, Mitsubishi, Nissan, Peugeot, Subaru, Suzuki, and Toyota. AIAM also represents original equipment manufacturers and other automotive-related trade associations. For further information, visit www.aiam.org.

ASSOCIATION OF INTERNATIONAL AUTOMOBILE MANUFACTURERS, INC.
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COMMENTS OF THE

ASSOCIATION OF INTERNATIONAL AUTOMOBILE MANUFACTURERS ("AIAM")

ON PROPOSED AMENDMENTS TO PASSENGER MOTOR VEHICLE GREENHOUSE GAS EMISSION STANDARDS

FOR THE FEBRUARY 25, 2010, CALIFORNIA AIR RESOURCES BOARD ("CARB") HEARING

February 17, 2010

AIAM[1] appreciates the efforts of CARB to draft th**ese promised amendments** required under the National Program for motor vehicle greenhouse gas emissions reduction. We look forward to working with CARB staff to fully implement the new National Program as outlined in the commitment letters of the various parties in interest. While AIAM fully supports the overall goals of the proposed regulatory amendments, AIAM offers these comments to address particular concerns and to request clarification of certain aspects of the proposal.

I. CARB's Evaluation of EPA/NHTSA Federal Standards Proposal

a. <u>CARB's comments on the Federal proposal,</u>

In the January 7, 2010, Staff Report/Initial Statement of Reasons ("ISOR"), CARB restated its concerns with certain aspects of the Federal proposal. In particular, it questioned the advanced technology credits and credit multipliers, the criteria for qualifying for early credits, and advocated the need for a backstop standard. Attached is a copy of AIAM's comment on the Federal proposal, and we request that CARB consider our positions on these matters. In our view, the advanced technology and early credits under the Federal system are essential to assure the feasibility of the proposed standards. Manufacturers' needs for such credits should be evaluated in the context of the historic nature of the proposed standards (in terms of the dramatic changes the standards will necessitate in vehicle design) and the economic environment in which manufacturers are being called upon to implement these changes. The early credits provide an essential safety valve for the transition to the aggressive new standards program.

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We note specifically two points made by CARB in the ISOR. First, CARB argues for the exclusion of credits for plug-in hybrid vehicles (PHEVs), with advanced technology credits being limited to electric and fuel cell vehicles. However, PHEVs are a new technology that is not yet on the market and that requires further development. Credits for PHEVs provide an additional incentive for manufacturers to pursue the development and introduction of that technology, which has the potential to achieve significant energy savings and greenhouse gas emission reduction benefits. Second, with regard to electric and hybrid vehicles, CARB argues that emissions ratings for such vehicles should reflect full life cycle emissions from electricity generation. However, ratings for conventional vehicles do not reflect full life cycle emissions associated with fuel production. AIAM does not necessarily oppose the concept of including life cycle emissions effects in compliance ratings for vehicles, but procedures used to accomplish this must be technology neutral and apply equally to all technologies, and standards levels must be adjusted to reflect the increased fuel-related emissions. In addition, depending on how life cycle emissions are incorporated, there could be overlaps with fuel-related programs which are also based on life cycle emissions.

CARB also argued for the addition of a backstop standard to assure total emissions benefits even if consumer demand changes resulting in product mix differences from the mix that was projected by the Federal agencies. This matter has been considered at length in CAFE rulemakings and by Congress during the EISA legislative process and we see no reason to reach a different conclusion from that set forth in the Federal proposal. A backstop standard would defeat the purpose of the attribute format and limit the flexibility of manufacturers to respond to shifts in market demand.

b. <u>CARB's assessment of the relative benefits of the Federal and Pavley standards.</u>

At several points in the ISOR, CARB suggests that its continued support for the National Program may depend on whether EPA makes changes to its proposed standards that CARB believes are necessary to ensure that the federal standards are of equivalent stringency to the Pavley standards. However, the commitment letters or "Rose Garden agreements", as some refer to them, do not require that the federal standards be of equivalent stringency to the Pavley standards.[2]

[2] On January 20, 2010 CARB Chairman Nichols reaffirmed California's support for the National Progam in the following statement –

> "The California Air Resources Board is fully committed to the agreement to establish a national vehicle greenhouse gas standard announced last May by President Obama in the Rose Garden," said ARB Chairman Mary D. Nichols. "There are still difficult technical issues to be resolved, as is to be expected in developing any pioneering rule, but we are confident that they will be worked out successfully. We look forward to working with both the EPA and the Department of Transportation in a spirit of cooperation to ensure the complete success of the Rose Garden agreement."

We appreciate that Chairman Nichols clarified CARB's position and expressed continued support for the National Standards Program.

According to CARB staff, "the U. S. Environmental Protection Agency and the U.S. Department of Transportation committed to adopt a federal program to reduce greenhouse gases and improve fuel economy, respectively, from passenger vehicles, to achieve equivalent or greater greenhouse gas benefits as the Pavley regulations for the 2012–2016 model years." ISOR at 3-4. The ISOR further states that "California committed to accept national program compliance for model years 2012 through 2016 with the understanding that it would provide equivalent or better overall greenhouse gas reductions nationwide than California's program (which has been adopted by 13 other states and the District of Columbia) standing alone." *Id.* Accordingly, the ISOR states that these amendments are being proposed "on the assumption that U.S. EPA will address ARB's concerns in the Final Rule for the National Program" and that "[i]f U.S. EPA does not address ARB's concerns in their Final Rule, staff will return to the Board to ask direction as to how to proceed." *Id.*

The statements in the ISOR concerning how the EPA emissions program fits into the National Program are not consistent with the plain language of the commitment letters, which do not contain any such assumption or requirement. The commitment letters require EPA to "propose[ ] national GHG standards substantially as described in the May, 2009 Joint Notice of Intent to conduct rulemaking." *See* May 18, 2009 Letter from Mary Nichols to Lisa P. Jackson and Ray LaHood. The Joint Notice of Intent does not obligate EPA to adopt tailpipe GHG standards that would "achieve equivalent or greater greenhouse gas benefits as the Pavley regulations," as stated in the ISOR. Rather, the Joint Notice of Intent states that the federal agencies would adopt standards that would "represent a harmonized and consistent national policy pursuant to the separate statutory frameworks under which EPA and DOT operate." *See* Notice of Intent to Conduct a Joint Rulemaking, 74 Fed. Reg. 24007 (May 22, 2009). The Joint Notice of Intent states that EPA, pursuant to the regulatory structure set forth in Section 202(a) of the Clean Air Act, "is considering proposing standards that would, if made final, achieve on average 250 grams/mile of CO2 in model year 2016 … with a generally linear phase-in from MY 2012 through to model year 2016." *Id.* at 24008. The Joint Notice of Intent also states that the EPA would "provide compliance flexibility to manufacturers, especially in the early years of the program" so that manufacturers would have "sufficient lead time to make necessary technological improvements and additions, and reduce the overall cost of the program without compromising overall environmental and fuel economy objectives." *Id.* at 24010. These program flexibilities would include allowing manufacturers to carry credits forward and backward, offering credits "to encourage the commercialization of advanced GHG/fuel economy control technology such as electric vehicles and plug-in hybrid electric vehicles," and allowing manufacturers to earn credits for early over-compliance. *Id.* at 24010. Nowhere in the Notice of Intent is it suggested that EPA's discretion to adopt its GHG emissions standards is limited to standards that achieve equivalent reductions to the Pavley program. Therefore, even if the final EPA rules does not, in CARB's opinion, achieve equivalent or greater greenhouse gas benefits as the Pavley regulations, that should not prevent the finalization of these amendments.

Equally important is understanding CARB's methodology for measuring the relative stringency of GHG emissions standards between the federal and California GHG programs. The bases and underlying assumptions for a determination by CARB that the National Program does not achieve equivalent or greater greenhouse gas benefits than the Pavley regulations should be transparent. The benefits analysis in the ISOR purports to show the comparative benefits of the proposed National Program as compared with the Pavley regulations. However, these two regulatory programs are structured differently and measure compliance differently. For example, the National Program is based on a footprint approach whereas the Pavley regulations provide unitary standards. Also, the programs have different provisions for accruing credits and debits and different vehicle classifications between the passenger car and light truck fleets. The California program exempts intermediate sized manufacturers from compliance requirements for several years, while the federal program provides only limited "alternative" standards for these manufacturers. The ISOR does not explain the assumptions and methodology underlying its evaluation of these and other differences in the programs or its comparison of the benefits of the two programs.

To the extent that CARB intends to use the relative greenhouse gas benefits of the joint National Program as a basis for its adoption of the regulatory amendments described in the commitment letters (and as discussed above it should not), then its method for making that determination and the assumptions underlying it should be more transparent. In fact, for continuing deliberations on the 2017+ MY program, it would benefit all interested parties, including EPA, NHTSA, and CARB, as well as other stakeholders, to agree on a methodology for assessing the benefits of these parallel programs.

II. Administrative Requirements

a. <u>Reporting requirements</u>.

CARB proposes to require manufacturers to submit to it the same emissions data the manufacturers must submit to EPA under the Federal GHG program. See Appendix B, section 4.5(b), Part I.H, ISOR page 13-14. In addition, CARB proposes to require manufacturers to submit separate emissions test and sales data for California and each of the section 177 states. The ISOR states that "[i]t should also be noted that adoption of this proposal does not eliminate the reporting requirements for California that have already been adopted by the Board prior to this hearing. Specifically, a manufacturer will still be required to submit emission testing data and sales data for California [and] each of the Section 177 states in sufficient detail to allow staff to verify the manufacturer's average greenhouse gas levels for each model year." ISOR at 4.

As noted in earlier AIAM comments, such a reporting requirement is inconsistent with the commitment letters and the National Program, and is unnecessary. (See AIAM's comments on CARB's first GHG amendments submitted on September 14, 2009.) According to the commitment letters, these regulatory amendments are to provide that "compliance with the GHG emissions standards adopted by EPA shall be deemed compliance with the California GHG emissions standards." The ISOR provides no

justification for requiring manufacturers to provide data for each individual state, and such data is not needed to show compliance with the amended regulations. In the event that a manufacturer opts into the federal program, all that should be required to verify compliance is to demonstrate compliance with the federal program as determined by EPA under its regulations.

b. <u>Notification of intent to combine state fleets</u>.

Appendix A, p. 4, subsection b, states that manufacturers must notify CARB prior to the start of the 2011 model year if they intend to comply with 2011 standards on the basis of their combined California plus section 177 state fleet. As AIAM previously pointed out, for some vehicles the 2011 model year could begin as early as January 2, 2010, before CARB's rule takes effect (see AIAM's 15-day notice comments submitted December 9, 2009). The same point applies with regard to Appendix B, p. 7. CARB should specify a date certain for the deadline for a manufacturer to request fleet combination for the 2011 model year as it did for the 2009 and 2010 model years in subsection a.

III. Compliance Shortfall for MY 2009-2011 CARB Standards

The regulations should provide greater guidance as to a manufacturer's obligations in the event of a net debit situation in model years 2009-2011. The proposed regulatory amendments provide that "a manufacturer [will] be required to either carry a zero greenhouse gas debit balance at the end of the 2011 model year or submit a plan for offsetting any greenhouse debits … using credits earned under the National greenhouse gas program before it may opt into the federal program. Upon approval of the plan by the Executive Officer, the manufacturer will be allowed to opt into the National greenhouse gas program." ISOR at 6; *see also* proposed Section 1961.1(a)(1)(A)(ii)(c). This proposal is different from the approach that was suggested in the ISOR supporting the September 2009 GHG amendments. That ISOR stated that in the event a manufacturer has accrued net debits at the end of the 2011 model year and then transitions to the federal program for the 2012 model year and beyond, "California will likely require that manufacturers opting into the federal program will offset any debits incurred in California by earning a commensurate number of credits in the federal program and retiring those credits rather than using them to meet their federal obligations…." August 7, 2009 ISOR at 4.

AIAM appreciates the consideration CARB has given to this issue, but we still see two problems with this proposal. First, as discussed in our comments in connection with the earlier amendments, this provision is inconsistent with the commitment letters. The CARB commitment letter requires the Board to amend its regulations "such that compliance with the GHG emissions standards adopted by EPA shall be deemed compliance with the California GHG emissions standards." Preventing a manufacturer from opting into the Joint National Program is inconsistent with the commitment letters, which place no restrictions on the manufacturers' ability to avail themselves of this option.

Second, neither the proposed regulations nor the ISOR provide any indication of what may be required of such a plan for offsetting any greenhouse debits. For product planning purposes, manufacturers will need greater clarity concerning what would be expected of them in the unlikely event of a debit situation remaining at the end of the 2011 model year. Moreover, this broad provision should not give CARB the unbounded discretion to condition a manufacturer's plan on provisions that would be inconsistent with the commitment letters or that would improperly impinge upon EPA's administration of its GHG emissions program. For example, although the proposed amendments appear to have abandoned CARB's earlier suggestion that manufacturers will be required to retire any federal credits used to offset debits in the California program, CARB should not condition a manufacturer's plan upon its achieving the same result. As discussed above, if a manufacturer is in compliance with the federal program for the post-2012 model years, then under the commitment letters it must be deemed to be in compliance with the California program, and should suffer no adverse consequences if it did not accrue credits in the federal program to offset debits in the California program.

With regard to one potential alternative to the current proposal, AIAM notes that if the California program were to continue in operation for a manufacturer past 2011, in parallel with the Federal program, manufacturers could use credits earned in model year 2012 and later years in California to offset a California debit remaining at the end of MY 2011. Such use of California credits would have no impact on Federal credits. At a minimum, CARB should allow a manufacturer to offset a debit remaining at the end of 2011 by showing that it would have earned sufficient credits under subsequent years' CARB standards, with no impact on Federal credits.

IV. Conditions for Opting Out of the California Program

CARB should provide greater guidance as to the requirements for showing compliance with the joint National Program. Proposed Section 1961.1(a)(1)(A)(ii)(b) provides that manufacturers opting into the joint National Program must, no later than May 1 of the calendar year following the close of the model year "submit to ARB a copy of the official report that it submitted to EPA as required under 40 CFR §86-1865-12 for demonstrating compliance with the National greenhouse gas program and the official EPA determination of compliance." It is not clear what CARB means by the term "compliance" with the federal GHG standards. Because of the provisions for carrying credits back, "compliance" with the EPA program for a specific model year may not be determined until several years after the close of the model year. Moreover, administrative delays could cause a final determination of compliance to occur after May 1 of the next calendar year. CARB should clarify that "compliance" with the joint National Program required under Section 1961.1(a)(1)(A)(ii)(b) does not mean that manufacturers must meet the standard every single model year, but rather is based on compliance as determined by EPA under its regulations.

If a manufacturer that opts out of the California program were to fail to comply with Federal standards in the 2012-16 period, that manufacturer would be subject to Federal enforcement, probably by both EPA and NHTSA. There would be no justification for California and potentially the Section 177 states to "pile on" such a manufacturer by seeking to enforce this situation as a separate violation of state standards, and no environmental or energy security benefits would result from separate state enforcement. We urge CARB to clarify its regulations by stating that it does not intend to pursue duplicative enforcement in such a situation.

V. Other Matters

a. <u>Final adoption of amendments</u>.

The ISOR states that "[u]pon release of the Final Rule, Board staff will issue 15-day changes, which will **finalize** California's adoption of this rule." ISOR at 4 (emphasis added).

However, this is not what California law requires for finalization of regulations. Before the regulatory amendments become final and have the force of law, California's Office of Administrative Law must approve them. See Cal. Govt. Code §§ 11343, 11343.4, 11349.1(a), 11349.3. *See*, e.g., July 24, 2007, letter from Tom Cackette to U.S. Environmental Protection Agency Re Waiver of Preemption at 27 ("ARB's regulations indeed are not final and enforceable under state law until California's Office of Administrative Law (OAL) approves them and submits them to California's Secretary of State.") Cal. Gov. Code Secs. 11349.3 and 11343-11343.8.").

b. <u>In-use testing program.</u>

CARB proposes to adopt references to EPA's requirement for a manufacturer in-use testing program (see ISOR, page 14 of Appendix B draft regulations, sections 1.5 and 2.4). Given the lack of any indication that carbon dioxide emissions rates will deteriorate in-use, there is no environmental need that would justify such a program. It is our understanding that CARB does not intend to adopt its own in-use test program, but we urge CARB to make clear in the final rulemaking notice that there is no such intent.

c. <u>References.</u>

The list of references in the ISOR does not include AIAM's reference letter. The AIAM letter may be viewed at http://www.epa.gov/otaq/climate/regulations/aiam.pdf .

November 25, 2009

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Air and Radiation Docket
Mail Code 2822T
1200 Pennsylvania Avenue, NW.
Washington, DC 20460

Docket Management Facility, M–30
U.S. Department of Transportation
West Building, Ground Floor, Rm. W12–140
1200 New Jersey Avenue, SE.
Washington, DC 20590

RE: Docket Nos. EPA–HQ–OAR–2009– 0472; NHTSA-2009-0059

Dear Sir or Madam:

The Association of International Automobile Manufacturers (AIAM[1]) is pleased to provide the enclosed comments on the joint EPA-NHTSA proposal for greenhouse gas emissions standards and corporate average fuel economy (CAFE) standards for the 2012-2016 model years (74 FR 49454; September 28, 2009). AIAM and our member companies fully support a single national program to address these two overlapping programs, and we commend the agencies for their efforts to develop a harmonized program as much as possible. We look forward to working with the agencies as you finalize this rulemaking early in 2010.

As you will note in our comments, there are several areas where we do not believe sufficient time was available to work out feasible solutions in the tight schedule necessary for this rulemaking proceeding; therefore, we have suggested that joint activities be undertaken with industry to address them. Notable among these are greenhouse gas provisions for methane and nitrous oxides, treatment of small volume manufacturers, and test procedures for air conditioning system efficiency. In addition, given the need for as much lead-

[1] The Association of International Automobile Manufacturers (AIAM) represents 13 international motor vehicle manufacturers who account for 35 percent of all light duty motor vehicles produced in the United States. AIAM member companies include American Honda Motor Co., American Suzuki Motor Corp., Aston Martin Lagonda of North America, Inc., Ferrari North America, Inc., Hyundai Motor America, Isuzu Motors America, Inc., Kia Motors America, Inc., Maserati North America, Inc., Mitsubishi Motors North America, Inc., Nissan North America, Inc. Peugeot Motors of America, Subaru of America, and Toyota Motor North America, Inc. AIAM also represents original equipment suppliers and other automotive-related trade associations.

time as possible going forward, we encourage the agencies to begin work on the next phase of standards for 2017 and beyond as soon as possible after the final rule is issued for the 2012-2016 period. We look forward to working closely with the agencies, California and the CAA section 177 opt-in states, and other stakeholders in maintaining a national program that meets our national needs to address climate change and energy security.

Please contact John Cabaniss, Director, Environment & Energy, if you or your staff have any questions at (703) 247-2107.

Sincerely

Michael J. Stanton
President and CEO

Enclosure

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COMMENTS OF THE
ASSOCIATION OF INTERNATIONAL AUTOMOBILE MANUFACTURERS, INC.

ON THE NHTSA/EPA JOINT PROPOSAL ON CAFE AND GREENHOUSE GAS STANDARDS FOR LIGHT VEHICLES MANUFACTURED IN MODEL YEARS 2012-16

November 25, 2009

The Association of International Automobile Manufacturers, Inc. ("AIAM") appreciates the efforts made by EPA and NHTSA to develop a single national program to address motor vehicle greenhouse gas emissions and fuel economy and welcomes the opportunity to provide its comments on the joint proposal (74 FR 49454; September 28, 2009). AIAM is a trade association representing 13 international motor vehicle manufacturers[1] that account for 35 percent of all light duty motor vehicles produced annually in the United States, and 43 percent of total U.S. sales.[2]

AIAM fully supports the overarching goal of the Notice of Proposed Joint Rulemaking (the "Notice"), which is to establish a "coordinated and harmonized approach" to implementing the Clean Air Act's mandate that EPA regulate motor vehicle emissions, and the mandate in the Energy Policy and Conservation Act (EPCA) that NHTSA regulate motor vehicle fuel economy. 74 FR at 49459. AIAM agrees that "[t]he National Program is both needed and possible because the relationship between improving fuel economy and reducing CO2 tailpipe emissions is a very direct and close one." *Id.* Consequently, "[w]hile there are emission control technologies that reduce the pollutants (e.g., carbon monoxide) produced by imperfect combustion of fuel by capturing or destroying them, there is no such technology for CO2." *Id.* "Thus, there is a single pool of technologies for addressing these twin problems, i.e., those that reduce fuel consumption and thereby reduce CO2 emission as well." *Id.* Because of this technical overlap, it is extremely important for the automobile industry that it not be burdened with the need to comply with two different and potentially conflicting regulatory regimes. The proposal set forth in the Notice is an important step in this direction.

AIAM offers comments on a number of areas that would allow further progress toward the goal of coordinated and harmonized standards. AIAM's recommendations would enable each agency to fulfill its statutory responsibilities while avoiding unnecessary burdens and costs on manufacturers and consumers.

[1] AIAM member companies include Aston Martin, Ferrari, Honda, Hyundai, Isuzu, Kia, Maserati, Mitsubishi, Nissan, Peugeot, Subaru, Suzuki, and Toyota. AIAM also represents original equipment suppliers and other automotive-related trade associations. See www.aiam.org for details.

[2] Nationwide, international automakers have invested $41 billion in U.S.-based production facilities, have a combined domestic production capacity of 4.1 million vehicles, directly employ 90,100 Americans, and generate almost 800,000 U.S. jobs in dealerships and suppliers nationwide.

I. The Proposals by EPA and NHTSA to Harmonize Their Standards Have Ample Legal Support

The core element of these proposals is for EPA and NHTSA to each separately adopt standards under each agency's enabling statute that will be of roughly equivalent stringency. The goal is, to the extent possible, to craft standards that would "allow auto manufacturers to build a single national light-duty fleet that would comply with both the GHG and the CAFE standards." Notice of Upcoming Joint Rulemaking to Establish Vehicle GHG Emissions and CAFE Standards, 74 FR 24007, 24009 (May 22, 2009). AIAM supports this proposal and agrees that doing so is consistent with both the Clean Air Act and EPCA.

EPCA requires NHTSA to set corporate average fuel economy (CAFE) standards at the "maximum feasible" level, taking into account technological feasibility, economic practicability, the effect of other motor vehicle standards of the government on fuel economy, and the need of the United States to conserve energy. 49 USC § 32902(f). The amendments to EPCA in the Energy Independence and Security Act of 2007 (EISA) further require that separate standards for passenger cars and for light trucks be set at levels high enough to ensure that the fuel economy of the industry-wide combined fleet of new passenger cars and light trucks reaches at least 35 mpg not later than the 2020 model year. Additionally, consistent with its mandate to promote motor vehicle safety, NHTSA also has traditionally considered the safety impacts of its motor vehicle regulations. *See, e.g.*, 74 FR at 49462 ("NHTSA considers the potential for adverse safety consequences when in establishing CAFE standards. This practice is recognized approvingly in case law.") (citing *Competitive Enterprise Institute v. NHTSA*, 901 F.2d 107, 120 at n.11 (D.C. Cir. 1990)).

The statutory requirements under which EPA sets emissions standards give that agency ample discretion to adopt standards that are in harmony with CAFE standards set by NHTSA. Section 202(a) of the Clean Air Act requires that standards set pursuant to the Act "shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period."[3] Although the Clean Air Act and EPCA employ different language in setting forth each respective agency's standard-setting criteria, there is nothing inherent in the language that would prevent each agency from reaching similar conclusions regarding the stringency of their respective standards.[4]

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[3] Notably, there is no requirement that EPA set emissions standards at the "minimum feasible" emissions level, similar to EPCA's command that fuel economy be set at the "maximum feasible level. Arguably, this gives EPA broader discretion in setting an appropriate emissions standard.

[4] Indeed, one court has held that although the two statutes use different language, they functionally require each agency to consider the same factors. In litigation regarding the adoption of state greenhouse gas standards, the District Court in Vermont determined that Clean Air Act Section 202(a) functions the same as EPCA Section 32902(f). *Green Mountain Chrysler Plymouth Dodge v. Crombie*, 508 F. Supp. 2d 295 (D. Vt. 2007). That court determined with regard to Section 202(a) that "[b]y statute, [the] factors [EPA considers] include technological feasibility (adequate time to permit development and application of requisite technology) and economic practicability (cost of compliance within that lead-time). See § 7521(a)(2)." *Id.* at 348. The court further found that EPA "impliedly" must "consider the [greenhouse gas] regulation's effect on consumer choice [and] the welfare of the automobile industry." *Id.* at 349. To the extent that the two statutes in fact set forth functionally equivalent criteria, then it stands to reason that EPA and NHTSA would reach similar conclusions concerning the stringency of their standards.

Finally, the need for inter-agency coordination found in the Notice was specifically recognized under *Massachusetts v. EPA*, 549 U.S. 497 (2007). That Court observed that EPA's regulation of greenhouse gas emissions might "overlap" with NHTSA's administration of the federal fuel economy program, but, because NHTSA and EPA are sister agencies within the same Executive Branch, the Justices concluded that "both [Agencies can] administer their obligations and yet avoid inconsistency." *Id.* at 532. The Court further noted that "EPA no doubt has significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies." *Id.* at 533. The proposals under consideration here represent the efforts of the two agencies to each "administer their obligations and yet avoid inconsistency."

II. Standards Related Issues

A. Nitrous Oxide and Methane Standards

EPA proposes capping emission rates for nitrous oxide and methane at current emissions levels. As EPA notes, even after adjusting for the higher global warming potential of these substances, they collectively account for less than 1 percent of light vehicle greenhouse gas emissions. *See* 74 FR 49507. EPA initially projects no economic impact resulting from these caps (*see* 74 FR 49511); however, the Agency later notes that this is not the case. Measuring and reporting these emissions will involve additional costs for manufacturers, particularly in the case of nitrous oxide. Additional test equipment will be needed to measure nitrous oxide emissions, with resulting facility costs for manufacturers. *Id.*, at 49525. Our members report that the currently available commercial laboratory test equipment for nitrous oxide measurement is not capable of accurately and repeatably measuring the very low levels of nitrous oxide emissions, i.e., 0.001 g/mile level, in vehicle exhaust, thus potentially increasing overall test burden due to voided tests as well as normal testing.

In addition, the nitrous oxide standard proposed by EPA is a vehicle-specific standard, not a fleet average standard as is provided for carbon dioxide, potentially creating an additional burden on manufacturers to assure consistent compliance across all vehicle models. EPA notes that nitrous oxide emissions vary with different types of catalyst designs, so it would be necessary for manufacturers to assure that each catalyst design in their fleet of vehicles would not increase emissions of that substance. Since current emission control technologies for NOx emissions also tend to control N2O, there is no current basis for concluding that overall N2O emissions could increase in the future.

AIAM concludes that a methane cap is unnecessary. The only potential scenario for an increase in vehicle methane emissions cited by EPA is a substantial increase in the production of CNG vehicles. *Id.* at 49525. EPA notes that current emission controls tend to achieve reductions in methane as well, so there is no basis for anticipating that methane emissions would generally increase. EPA subsequently states that recent CNG vehicles meeting Tier 2 standards have had methane levels consistent with conventional vehicles. *See Id* at 49526.

Available data and information provide no basis for anticipating that either nitrous oxide or methane emissions will increase in the future, and current Tier 2 (and potentially future standards as well) would tend to reduce emissions of these substances. Additional testing and administrative burdens would be required to comply with the proposed caps, and new test equipment would be needed to measure nitrous oxide emissions. For these reasons, we urge

EPA to adopt a default CO2 equivalent emission value for these substances for the 2012-2016 model years, similar to the approach that CARB took. Testing and reporting of these emissions should not be required. Certification should be based on manufacturers' providing engineering evaluations and statements.

If EPA believes further information is needed to assure that emissions of these substances do not increase, we urge the agency to work with auto manufacturers to pursue a research-type program to conduct testing of new vehicles for these substances. The level of testing for such a program would be less than that required if standards were adopted and would focus on technologies that EPA believes are most likely to produce higher emissions of the two substances. AIAM would be willing to support a request to Congress for additional budget resources for EPA to conduct such a program. As noted below, AIAM proposes a similar approach to address speculative concerns about in-use deterioration of greenhouse gas emissions and testing of air conditioning systems.

Notwithstanding the concerns expressed above, should EPA determine that nitrous oxide and methane regulation in some form are necessary, those substances should be regulated on a carbon dioxide-equivalent, fleetwide default basis, as California has done. In that way, manufacturers would have greater flexibility in choosing methods to achieve equivalent levels of greenhouse gas emission reductions. However, in the case of nitrous oxides, if EPA should adopt testing requirements, then significant lead-time is needed to address the measurement accuracy and quality control issues mentioned above. In the case of methane, current EPA test methods and required equipment allow the measurement of this gas; therefore, AIAM members are willing to voluntarily collect and report that information as part of certification testing.

B. In-Use Standard

EPA also proposes in-use carbon dioxide standards that would apply throughout a vehicle's useful life, with the standard determined by adding a 10 percent adjustment factor to the model-level emission results. This proposal is made notwithstanding EPA's statement that there is no current basis for believing that the emissions of carbon dioxide or fuel economy deteriorate in-use.

> Data from EPA's current in-use compliance test program indicate that CO2 emissions from current technology vehicles increase very little with age and in some cases may actually improve slightly. The stable CO2 levels are expected because unlike criteria pollutants, CO2 emissions in current technology vehicles are not controlled by after treatment systems that may fail with age. Rather, vehicle CO2 emission levels depend primarily on fundamental vehicle design characteristics that do not change over time. Therefore, vehicles designed for a given CO2 emissions level would be expected to sustain the same emissions profile over their full useful life. *See* preamble at 49562.

Under EPA's in-use verification program (IUVP), manufacturers would be required to add a highway fuel economy test (HFET) for each in-use test vehicle. *See* preamble at 49563, proposed section 86.1845-04.

There is no requirement in the Clean Air Act that mandates in-use testing. Although the Clean Air Act provides that emissions standards are to be applicable for the "useful life" of the vehicle,

no particular level of testing to assure compliance over the useful life is mandated by the statute, and EPA has the discretion to craft a compliance testing program that does not include in-use testing. *See* 42 USC 7521(a)(1).

In addition to the lack of any demonstrated need for an in-use test program, there are other practical problems as well. The model type emission level that serves as the proposed basis for the in-use standard is an average value, not a test result across all the models in a particular test group. Not all vehicle configurations or subconfigurations in the test group are tested. If a vehicle selected for in-use testing were from a higher emitting configuration due to its basic characteristics, the test vehicle would be expected to have higher emissions than the model type average. In addition, certification vehicles must represent mean production tolerances, so by definition half of production vehicles would be expected to have higher emissions than the certification vehicle. EPA's proposed approach only deals with the test-to-test variability and does not address these other problems.

A fundamental complication associated with an in-use standard for carbon dioxide is that, unlike the current program for criteria pollutants, there is no opportunity for a manufacturer to "over-comply" by creating additional compliance headroom to reduce the impact of the previously noted problems. Under the current program for criteria pollutants, manufacturers usually certify to emissions levels well below applicable standards to provide for the possibility of production variability, among other things.

It is also not clear what the significance of a failure to meet the in-use standard would be. We presume that there would be enforcement consequences only if the fleet average standard is not met, so only a widespread deterioration problem would affect fleet average compliance. There should be no enforcement consequences directed at a single model, without evidence of fleet average noncompliance. In any case, EPA should clarify in the final rule what procedure it would follow in enforcing a noncompliance with in-use standards, and what would constitute such a noncompliance.

As with the methane and nitrous oxide standards, the in-use test program proposed by EPA is intended to address a theoretical, speculative problem. We do not suggest that it is inappropriate for EPA to be concerned about in-use deterioration of carbon dioxide emissions, but requiring significant amounts of additional testing by manufacturers at this stage is not justified. A more appropriate approach would be a research program to evaluate whether there is a deterioration problem, particularly with new technology. This program could be similar to AIAM's recommendation above with respect to methane and nitrous oxide standards.

If EPA decides to pursue an in-use testing program for compliance purposes, notwithstanding the current lack of an indication of an in-use deterioration problem, it should at least adopt a different approach. One improvement would be to apply the 10 percent factor to the test result of the most similar configuration that was tested for certification, rather than the model type average. This would make the in-use standard more representative of the test vehicle.

The current EPA regulations governing the in-use vehicle program (IUVP) provide for EPA approval of a reduction in test burden, based on a manufacturer's demonstration of consistent compliance with in-use standards. *See* section 86.1852-01. Despite recent discussions with auto manufacturers on reducing IUVP test burden, such reductions have not yet materialized, and

EPA is now proposing increasing IUVP test burdens by adding the highway test. AIAM requests the Agency consider the overall IUVP test burden on manufacturers and continue to work with manufacturers to identify ways to reduce overall IUVP test burden while satisfying the need for additional testing for greenhouse gas purposes.

EPA proposes a zero (additive) or one (multiplicative) deterioration factor for carbon dioxide, because it is recognized that vehicle carbon dioxide emissions generally do not deteriorate in-use. EPA also raises the possibility of changes in deterioration factors which could be ordered by Agency staff in compliance plan discussions with the manufacturer (*see* preamble at 49562). A change in the deterioration factor would be equivalent to a change in the stringency of the standard. A change of this sort would eliminate the harmonization achieved between CAFE and greenhouse gas standards. Because of the significant consequences of a change in a deterioration factor, such a change should only be implemented after notice and opportunity for comment. AIAM agrees with EPA that a change in a deterioration factor would require adequate lead-time to enable the manufacturer to comply. *See* proposed section 86.1823-08(m)(1)(ii).

C. Small Volume Manufacturers

The proposed greenhouse gas regulatory program makes accommodations for two groups of smaller manufacturers. For mid-sized companies (those with U.S. annual sales levels below 400,000 units), EPA has proposed "temporary lead-time allowance standards." EPA states that these alternative standards provide additional compliance lead-time for mid-sized manufacturers that offer narrow product lines in the U.S. Some of these companies have traditionally paid CAFE civil penalties as an alternative to compliance, but would not be able to follow that approach under greenhouse gas standards. For these companies, EPA proposes to provide additional compliance lead-time for model years 2012-15. *See* proposed section 86.1818-12(e). EPA has also proposed to defer setting standards for entities that meet "small business" size criteria under U.S. Small Business Administration (SBA) regulations, 13 CFR 121.201. [5] *See* proposed section 86.1801-12(j). The small business entities that would be exempted include two manufacturers, Saleen and Tesla, as well as independent commercial importers and alternative fuel vehicle converters. *See* preamble at 49745. For a manufacturer to qualify as a small business, it must have no more than 1000 employees. EPA justifies this exemption based on the minimal greenhouse gas emissions of these companies due to their very small volume. *See,* e.g., preamble at 49629.

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[5] The regulatory language proposed in section 86,1801-12(j) is as follows:
Businesses meeting the Small Business Administration size standard defining a small business as described in 13 CFR 121.201 are eligible for exemption from the greenhouse gas emission standards specified in § 86.1818–12 and associated provisions.
So, in order to qualify for the small business exemption, the manufacturer must meet the SBA "size standard." The "size standards" in 13 CFR 121.201 are specified only in terms of a number of employees, 1000 in the case of vehicle manufacturers. The EPA regulation does not state that the manufacturer must meet the definition of "small business concern" (which excludes foreign entities) under the Small Business Act in order to be exempted. There is no justifiable reason to limit the small business exemption to U.S. based companies, and doing so would present serious concerns under international trade agreements. If EPA decides to maintain this small business exemption in the final rule, it should clarify that the exemption is available to small entities regardless of location. This issue could be avoided entirely if EPA adopts our recommendation to use the small volume certification criterion of 15,000 units U.S. sales annually to exclude small manufacturers for the 2012-16 period.

There are a small number of manufacturers that fall between the two size categories addressed by EPA and for whom no relief is proposed by EPA. These companies produce a very limited number of models consisting entirely of luxury/high performance vehicles that, because of their essential features would not be able to meet greenhouse gas standards. Aston Martin and McLaren are examples of independent companies of this type. Ferrari and Maserati are independently operated companies that also fall into this category. These vehicles are very expensive, are sold in very small volumes, and are inherently unique and special high performance vehicles that typically accumulate few miles per year. As a result, their impact on total greenhouse gas emissions is negligible, as with the small business category. While it is reasonable to project some improvement in greenhouse gas emissions for this category of vehicles, it is unrealistic to project that these vehicles could meet the generally applicable standards in the 2012-2016 period.

While it is possible that these small volume manufacturers (SVMs) might be able to comply with greenhouse gas standards by purchasing credits from other manufacturers, this is far too speculative a solution. The market for credits is unpredictable at this point. Other than exiting the U.S. market, therefore, the only other possible solution for an independent SVM would be to sell an equity interest in the company to a larger, full-line manufacturer, so that the emissions of the luxury vehicles could be averaged in with the much larger volume of other vehicles produced by the major manufacturer, This cannot possibly be the outcome EPA intends, especially when measured against the minimal, if any, environmental benefit that would result.

The proposed regulations recognize the acute difficulty which SVMs may face in complying with the fleet average emission and fuel economy requirements. In discussing the proposal for the Temporary Lead-Time Allowance Alternative Standards (TLAAS), EPA states:

> Manufacturers with limited product lines may be especially challenged in the early years of the proposed program. Manufacturers with narrow product offerings may not be able to take full advantage of averaging or other program flexibilities due to the limited scope of the types of vehicles they sell. For example, some smaller volume manufacturers focus on high performance vehicles with higher CO2 emissions, above the CO2 emissions target for that vehicle footprint, but do not have other types of vehicles in their production mix with which to average. Often, these manufacturers pay fines under the CAFE program rather than meeting the applicable CAFE standard. *See* 74 FR at 49483.

AIAM believes that this assessment is correct and that either a more generous lead-time allowance or an alternative, relaxed standard would be the appropriate solution for these types of SVMs.

There is ample legal authority for EPA to provide SVMs a more generous lead-time allowance or an alternative standard. Indeed, EPA recognizes such authority in the proposal for a small entity deferment (for those companies defined under the Small Business Administration's regulations), *see* 74 FR at 49574, and in the TLAAS. These provisions are consistent with previous EPA rulemaking under the Clean Air Act which offer relief to SVMs. For example, in the Tier 2 program, EPA exempted SVMs from the phase-in requirements in the early model years of the emission exhaust and evaporative standards. *See* 40 C.F.R. § 86.1811-04(k)(5). In doing so, EPA correctly found that "phase-in schedules, in general, add little flexibility for manufacturers

with limited product offerings because a manufacturer with only one or two test groups can not take full advantage of a 25/50/75/100 percent or similar phase in." *See* Control of Air Pollution From New Motor Vehicles: Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements; Final Rule, 65 FR 6698, 6743 (February 10, 2000). Accordingly, "[f]or manufacturers meeting EPA's definition of 'small volume manufacturer,' [EPA] proposed to exempt those manufacturers from the phase-in schedules and require them to simply comply with the final 100% compliance requirement." *Id.* Other agencies likewise offer such relief for SVMs that may face particular compliance hurdles on account of their size. *See, e.g.,* Nat'l Highway Traffic Safety Administration, Early Warning Reporting Regulations, 74 FR 47740 (September 17, 2009) (creating a small manufacturer exemption where the underlying statute was silent on the availability of such exemption). It should also be noted that the NHTSA CAFE program and the California greenhouse gas standards program both provide relief for manufacturers in the size range in question, although the NHTSA program is statutorily mandated. In fact, the California standards exempt SVMs (and intermediate sized manufacturers) until the 2016 MY. There is also nothing in the Clean Air Act that would prevent EPA from providing an alternative and more relaxed emissions standard for SVMs. Section 202(a) does not require a one-size-fits-all standard that would be applicable to each and every manufacturer. Rather, that section requires EPA to set "standards applicable to the emission of any air pollutant ***from any class or classes of new motor vehicles*** or new motor vehicle engines." 42 USC § 7521(a) (emphasis added). The statute does not restrict EPA's discretion in how the "classes of new motor vehicles" should be defined.

While AIAM believes the correct approach is for EPA to set an alternative, relaxed standard for SVMs, we recognize that there is insufficient time available in this rulemaking proceeding between now and the final rule projected for completion by March 31, 2009, for EPA to collect the relevant product plans and technology feasibility information from SVMs, conduct the necessary reviews and modeling that may be needed, consult with the stakeholders, issue a supplemental proposal for an alternative, relaxed standard for SVMs for public comments, and then determine the appropriate final standard. Indeed, when California adopted its GHG vehicle standards in 2004 it recognized the difficulties in grouping all SVMs together and provided three compliance options for them. One California SVM compliance option is an alternative standard, but California, even then, recognized that lead-time would be needed to develop an alternative standard and provided for development of an SVM standard by 2012 for compliance in 2016. Therefore, we believe it appropriate for EPA to defer decisions on the SVM alternative standard to the next rulemaking for the 2017+ MY.

For these reasons, AIAM recommends that EPA adopt the same approach for SVMs as it proposed for the small business entities. EPA should defer setting standards for these companies now, but should consider setting standards in a future proceeding. Conceptually, the future small volume standards should be set on a class basis for all vehicles produced by these companies. Such a standard could assure that these vehicles make a contribution to reducing overall greenhouse gas emissions, although their total emissions are extremely small. The nature of the small volume class standard should reflect the fundamental nature of the vehicles. AIAM also urges EPA to apply the definition of SVM used in the EPA current small volume certification program of less than15,000 annual U.S. sales. *See* 40 CFR § 86.1838-01(b)(1)(i).[6]

[6] *Small volume manufacturers.* (i) The optional small-volume manufacturers certification procedures apply to LDV/Ts and MDPVs produced by manufacturers with sales in all states and territories of the United States,

AIAM has one other serious concern with the TLAAS program as it is proposed by EPA. As proposed, "manufacturers with no U.S. sales in model year 2009 would not qualify for the . . . program." *See* 74 FR at 49523. This criterion is patently unfair to manufacturers which may decide to market vehicles in the U.S. in the future but did not do so in the 2009 MY. EPA should redefine the program to allow such manufacturers to qualify for this program. Additionally, any new SVMs entering the market should be treated similarly as SVMs currently marketing vehicles in the U.S.

D. On-board Diagnostic (OBD) Systems

It would be premature for EPA to adopt a requirement for monitoring carbon dioxide emissions at this time. As EPA observes, it is not clear yet whether such monitoring is feasible. *See* preamble at 49574.

E. Calculation of Fuel Economy/Greenhouse Gas Targets

AIAM believes that further harmonization is needed with respect to footprint calculations. Under the proposed regulations, it is not clear that the same procedure would necessarily be used to determine the regulatory targets for specific vehicles for CAFE and greenhouse gas purposes. Under the CAFE regulations, targets and footprints are determined on a "model" basis, but the term "model" is not defined. *See* 49 CFR 531.5 and 533.5. The calculation procedure is much more specific under the proposed greenhouse gas regulations, under which calculations are based upon the sales-weighted footprints of each unique vehicle footprint. AIAM recommends that the CAFE procedure be modified to be more consistent with the more specific greenhouse gas approach. In that way, the chances of discrepancies arising with regard to compliance calculations would be reduced.

III. Credit Issues

A. Air Conditioning Credits

AIAM supports EPA's proposal to rely on a menu-based approach to assess air conditioning refrigerant leakage, as set forth in proposed section 86.166-12. The leakage rate of refrigerants is very low, and direct measurement of leakage would require expensive new test facilities and the development of new test procedures, as EPA notes. See preamble at 49527. Moreover, given anticipated movement toward lower global warming potential (GWP) refrigerants, leakage impacts on climate change will likely be substantially reduced. However, EPA should allow the flexibility for manufacturers to provide data to substantiate the achievement of lower leakage rates than predicted by the EPA menu that is based on SAE Standard J2727.[7]

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including all vehicles and engines imported under provisions of 40 CFR 85.1505 and 85.1509 (for the model year in which certification is sought) of fewer than 15,000 units (LDV/Ts, MDPVs, heavy-duty vehicles and heavy-duty engines combined).

[7] When the SAE Interior Climate Control Committee developed J2727 there was considerable discussion about the merits of basing J2727 on design elements only versus recognizing the significant role that assembly line quality control practices have upon the potential for AC refrigerant leakage reduction. In essence, superior quality control practices on the assembly line can overcome some of the design elements which receive lower relative

EPA proposes to use a slightly modified version of the SAE J2727 protocol for the menu-based leakage assessment. Instead, EPA should rely on the J2727 protocol as adopted by SAE. The SAE Interior Climate Control Committee reviews the standard regularly and updates it as needed. EPA will obtain the best engineering estimates for leakage by using the most current version of J2727 without modification.

With regard to air conditioning system efficiency credits, EPA also proposes to base credits on a technology menu approach, but only for model years 2012-2013. Thereafter, EPA proposes to require that manufacturers justify credits based on testing using an idle test developed by the Agency. We have several concerns regarding the Agency's proposed idle test approach for a performance-based measurement of air conditioning system efficiency. There are many existing technologies and new ones in development to improve the energy efficiency of air conditioning systems. The efficiency improvement resulting from the application of each technology does not necessarily apply under all operating conditions. For instance, efficiency improvements in engine cooling fans will typically be apparent at engine idle but not necessarily at road speeds. Variable displacement piston compressors are the original and one of the highest value technologies for improving MAC energy efficiency; however, their benefit occurs at low and mid-load conditions - typically road speeds. Testing at high load conditions would not detect their energy benefit when compared to fixed displacement piston compressors. Series Reheat Reduction provides benefits primarily at mid-load conditions. Air Inlet Mixture control provides its benefit at mid and high load conditions when the HVAC system is not already in recirculation mode.

Testing at idle is not reliably repeatable due to changes in the engine idle speed and especially due to changes/variances in vehicle front-end airflow and temperature due to front-end recirculation (engine heat recirculating to the front face of the condenser). Available field data indicate that engine idling accounts for only 15 to 20% of vehicle use. Therefore, testing only at one engine condition, an idle condition, would not be repeatable nor is it representative of the widely varying conditions and therefore energy used by the MAC system. Relying on the idle test would encourage the use of technology that reduces energy usage at idle in low to mid ambient temperature conditions at the expense of energy efficiency at road speeds and other conditions. Some of the most energy efficient technologies would not show any benefit at this condition – Air Inlet Mixture control (which is capable of up to a 35% reduction in overall A/C energy usage) would not likely show any savings in the proposed EPA test procedure. In summary, the proposed test would not encourage the implementation of many of the most promising technologies that have been developed or are under development.

We are also concerned about the impact that the Agency's idle test approach would have on manufacturer and Agency resources. The Agency's proposed concept would establish a new test that would have to be performed by manufacturers and the Agency on large numbers of vehicles to provide data for greenhouse gas compliance purposes

In the preamble, EPA requested comments on the potential for using the SC03 test cycle for assessing air conditioning efficiency. While there may be some merits of using the SC03 cycle

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ratings in J2727. Therefore, any program based on J2727 should include flexibility for manufacturers to provide data to substantiate the achievement of lower leakage rates than predicted by J2727.

for this purpose, as we note below, AIAM believes that a focused test program should be carried out in conjunction with industry and other interested stakeholders to determine the best performance test for assessing air conditioning system efficiency.

AIAM recommends that the Agency defer action on the adoption of a performance test to assess air conditioning system efficiency and rely on the menu-based approach. EPA should work with the Society of Automotive Engineers Interior Climate Control Committee to develop a more robust test approach that accurately measures system efficiency over a broad range of engine operating conditions. This test procedure could be used to verify the accuracy of the credits set forth in the menu and revise those items as necessary, consistent with the research program recommended above. In addition, such a test program could also assess what, if any, effects new low GWP AC systems may have on test procedure development. It would be especially important to consider the impact of these new AC systems since they will be the dominant AC designs for the foreseeable future. It may be appropriate for EPA to consider an improved performance test for the 2017+ program.

However, if EPA insists that the idle test approach must be included in the final rule, that test should be considered as only one of the parameters that determines the air conditioning credit. In addition, it is unclear why EPA has proposed to grant efficiency credits only if gains in efficiency of at least 30 percent are achieved. *See* preamble at 49530. Under proposed section 86.1866-12(c)(5)(iii), only air conditioning systems that increase emissions by less than 14.9 grams per minute, as measured under the Agency's idle test, would qualify for credits. The Agency should encourage all efficiency improvements, and lesser improvements should receive proportionately smaller credits.

AIAM supports the Agency's proposed approach for credits for alternative refrigerants with low Global Warming Potential. We believe it is appropriate to base these credits on the relative GWP values of the current versus alternative refrigerants. In addition, we support EPA's proposal for additional credit for the end-of-life benefits associated with alternative refrigerants.

Since the legacy fleet of vehicles, which uses the current refrigerant with a higher GWP, will be in use for many vehicles into the future, AIAM encourages EPA to work with the SAE committee, auto manufacturers, and the auto service industry to enhance air conditioning maintenance and refrigerant recovery/recycling.

B. Early Year Credits

AIAM supports EPA's proposed "four pathways" approach for earning early "fleet average" credits as well as the early air conditioning, advanced technology, and off-cycle credits. All of the proposed credits are designed to appropriately reward manufacturers that achieve levels of efficiency that exceed expected levels.

EPA invited comment on whether the proposed early credits provide a "windfall" and whether the credits reward "real world" emission reductions. EPA does not explain what is meant by "windfall" credits. In our view, the CAFE program and the California greenhouse gas program provide a general benchmark for appropriate levels of vehicle efficiency for the 2009-2011 period. Early credits would reward companies that exceed this benchmark. In order to qualify for credits under EPA's proposal, manufacturers would have to offer vehicles that achieve

efficiency levels that exceed typical current levels. Any resulting credits would truly be earned, not a windfall, and would result in real world fuel savings and lower greenhouse gas emissions.

In the public hearings on the proposed standards, several parties expressed concerns regarding the appropriateness of the early credits that were proposed by EPA, arguing that the credits are too "generous." In our view, the proposed early credits are essential to assure the feasibility of the proposed standards. Manufacturers' needs for such credits should be evaluated in the context of the historic nature of the proposed standards (in terms of the dramatic changes the standards will necessitate in vehicle design) and the economic environment in which manufacturers are being called upon to implement these changes. The early credits provide an essential safety valve for the transition to the aggressive new standards program.

Early fleet average credits under pathways 1, 2, and 3 are based on credits and debits earned in the California program. These provisions are necessary to counter CARB's proposal to require manufacturers with net debits in California at the end of the 2011 model year to use and retire federal credits to make up for the California debits. To the extent that California will require that debits be carried over from the California to the federal program, it is only fair that credits be carried over as well. AIAM has opposed California's claim to authority to cancel Federal credits. We urge NHTSA and EPA to support our concerns on that point. California has no direct regulatory authority over the Federal program, and AIAM therefore does not believe that CARB has the power to require a forfeiture of Federal credits. Moreover, in the 2012 model year and thereafter, a manufacturer will have the option under the California program of continuing to comply separately with the California program or transitioning fully to the federal program, in which case compliance with the federal program will be "deemed" to be compliance with the California program. Should a manufacturer transition to the federal program, the intent of the commitment letters signed by the parties to the national standards agreement is that it will no longer have any compliance obligations with regard to California after that date. We urge NHTSA and EPA to address our concerns on this point.

As for the off-cycle credits, EPA should facilitate transparent and fair evaluation of both the off-cycle credits for technologies and of the technologies themselves, so that all companies would have a fair opportunity to avail themselves of the credits. EPA should publish proposed off-cycle approaches in the Federal Register as they are requested by a manufacturer, allow a reasonable amount of time for comment on the proposed approach, and then, if the request is granted, make the credits available one year after the final decision by the Agency. These comments on the off-cycle credits apply not only to the early credits but also to those that would be used in the 2012-2016 period.

C. VMT Adjustment Factors for Car-Truck CAFE Credit Transfers

Under NHTSA's regulations governing CAFE credit transfers, the value of credits are adjusted to reflect the anticipated lifetime vehicle miles travelled (VMT) for the credit-earning and credit-using vehicle categories. *See* 49 CFR 536.4(c). That regulation specifies anticipated lifetime VMT for passenger cars of 150,922 miles and for light trucks of 172,522 miles. However, the preamble to the final rule establishing the credit provisions and the 2011 CAFE standards, the agency states that "NHTSA expects to reevaluate trends in vehicle survival and mileage accumulation in the future, and to adjust these VMT factors accordingly in future CAFE rulemakings." *See* 74 FR 14434, March 30, 2009.

In the 2012-16 rulemaking, NHTSA developed new estimates for lifetime VMT, based on revised estimates of future fuel prices and the "rebound effect" on future travel. These estimates are 190,971 miles for passenger cars and 221,199 miles for light trucks. *See* Joint Technical Support Document, Tables 4-4 and 4-5. The credit adjustment regulations in section 536.4(c) should be updated to reflect these new VMT estimates. Since NHTSA previously indicated in the 2011 rule its intent to update these factors, and the 2012-2016 proposal provides new VMT estimates, separate notice and opportunity for public comment should not be required for this technical amendment.

D. Elimination of Separate Car and Truck Caps for FFVs

Under the proposal, flexible fuel vehicle (FFV) credit caps are applied separately to each manufacturer's car and truck fleet. In the case of the CAFE standards, this approach is required by statute. The effect of the separate caps is to require manufacturers to market FFVs in both fleets if they want to earn the maximum credit. However, the marketability of FFVs varies depending on such factors as the local availability of refueling infrastructure and the type of vehicle. AIAM urges EPA to establish a single cap for all FFVs and allow manufacturers to allocate the credit between their car and truck fleet as they deem most appropriate. By eliminating the separate caps, manufacturers would receive enhanced compliance flexibility while reducing consumer cost impacts. We recognize that our recommendation would involve reduced harmonization between the CAFE and greenhouse gas programs, but in this case the flexibility benefits outweigh the loss in harmonization. We would support a legislative amendment that would allow the same approach to be taken with regard to the CAFE program.

IV. Compliance Issues

A. Recall

As recognized in the proposal, recall is not an appropriate enforcement mechanism for fleet-average regulations.

> Unlike the National Traffic and Motor Vehicle Safety Act, EPCA does not provide for recall and remedy in the event of a noncompliance. The presence of recall and remedy provisions in the Safety Act and their absence in EPCA is believed to arise from the difference in the application of the safety standards and CAFE standards. A safety standard applies to individual vehicles; that is, each vehicle must possess the requisite equipment or feature that must provide the requisite type and level of performance. If a vehicle does not, it is noncompliant.
> …
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> In contrast, a CAFE standard applies to a manufacturer's entire fleet for a model year. It does not require that a particular individual vehicle be equipped with any particular equipment or feature or meet a particular level of fuel economy. It does require that the manufacturer's fleet, as a whole, comply. … Thus, under EPCA, there is no such thing as a noncompliant vehicle, only a noncompliant fleet. No particular vehicle in a noncompliant fleet is any more, or less, noncompliant than any other vehicle in the fleet. *See* 74 FR at 49464.

The same rationale that counsels against adopting recall as an enforcement mechanism for CAFE standards would apply with just as much force to corporate average GHG emissions standards. To the extent that a manufacturer fails to meet the corporate average GHG emissions standard for a given year, it will most likely be because it failed to balance its fleet and sell the proper mix of vehicles, and not because of a failure of an emissions control device. Indeed, given the fact that the technologies that reduce GHG emissions relate principally to the efficiency with which the vehicle converts fuel to energy—such as, for example, hybrid or plug-in engines, advanced transmissions, and mass reduction—these technologies are not likely to "fail" in the sense that they are not functioning properly to reduce emissions. Rather, a fleet of perfectly functioning vehicles may nonetheless fail to meet the GHG emissions standard if the anticipated mix is not sold. Under these circumstances, recall would be an entirely inappropriate remedy.[8] The Clean Air Act gives EPA the discretion to forego ordering a recall where the failure to meet an emission standard is the result of fleet imbalance. Section 207(c)(1) of the Clean Air Act provides that where "a substantial number of any class or category of vehicles or engines" fail to meet an emissions standard, then the manufacturer is to "submit a plan for remedying the nonconformity of the vehicles or engines," and that plan is to provide that the nonconformity "will be remedied at the expense of the manufacturer." 42 USC § 7541(c). Where the nonconformity is the result of a fleet imbalance, then the manufacturer can "remedy" the nonconformity in ways that do not include recalling its fleet.[9]

For the above reasons we urge EPA to specify those limited circumstances under which recall would be appropriate for noncompliance with its greenhouse gas emissions requirements.

B. Evaluation of Compliance Plans

EPA proposes to require manufacturers to submit a pre-model year compliance plan and conduct a pre-model year conference with Agency staff. *See* preamble at 49560. The EPA plan would be similar to the CAFE pre-model year report but would also contain information on anticipated credits. The preamble does not identify a clear purpose for the review of the plans, criteria for evaluating the plans, or consequences if EPA finds the plans to be unacceptable.

In the case of a manufacturer that is in clear compliance jeopardy, a pre-model year compliance meeting to discuss future compliance assurance may be appropriate on an ad-hoc basis. However, we question the value of preparing regulatory compliance plans in advance as a general matter. Such plans are likely to change, since they are subject to the vicissitudes of the market. Developing and evaluating these plans will take time and effort, but by the time the plans are evaluated by EPA, the manufacturer's compliance strategy may well have changed.

The Agency should not attempt to take any enforcement action based on an asserted inadequacy of a plan. Compliance should be determined only after the end of a model year and the subsequent credit earning period. This characterization of the pre-model year plan should be in the final rule.

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[8] However, in the event that a failure to meet the fleet average GHG emissions standard is traceable to a failure of a particular emissions control technology or device, then a recall of those vehicles impacted by such a failure would be appropriate.

[9] To the extent that EPA disagrees and reads Section 207(c) as restricting its discretion to forego requiring a recall where a fleet that does not comply with the GHG standards, then AIAM would recommend legislation clarifying that recall is not a required remedy for noncompliance with a fleet-average GHG emissions standard.

C. Public Dissemination of Compliance Information

EPA proposes to release to the public GHG compliance information. *See* preamble page 49559. Any such release should not include proprietary confidential business information that was provided by the manufacturer to EPA. For example, public dissemination of information regarding manufacturer plans to earn future credits could release information about future product plans that would otherwise be confidential. EPA regulations regarding exemptions from the release of agency information to the public are based on the Freedom of Information Act, 5 USC 552(b). Those regulations exempt from public release "trade secrets and commercial or financial information obtained from a person and privileged or confidential." *See* 40 CFR Part 2, section 2.105(a)(4). Future credit plans should fall in this category. AIAM recommends that EPA's final rule clarify how confidential business information will be protected.

D. Test Procedures

AIAM does not support fundamentally changing the fuel economy/greenhouse gas test procedures at this time. Our reluctance to support such changes is due to the impact that such changes could have on the effective stringency of the standards. Any future changes should be accompanied by offsetting changes in the stringency of the standards and should provide adequate lead-time for manufacturers to make necessary changes to test equipment and reflect the new procedures in their compliance plans.

It is necessary to have consistent and similar test procedures for battery electric vehicles, plug-in hybrids, and fuel cell vehicles. AIAM urges EPA to pursue the development of such test procedures in conjunction with the Society of Automotive Engineers.

V. Standard Setting Issues

A. Economic Practicability Versus Maximizing Net Consumer Benefits

NHTSA is proposing to set CAFE standards at levels that the agency determined to be "below the point at which net benefits are maximized, due to economic practicability concerns." 74 FR at 49635. This proposal is entirely within NHTSA's statutory discretion.

NHTSA is required under EPCA to set CAFE standards at the "maximum feasible average fuel economy level." 49 USC § 32902. The term "maximum feasible" is not defined in the statute; rather EPCA required that NHTSA, in determining this value, must consider "technological feasibility, economic practicability, the effect of other motor vehicle standards of the Government on fuel economy, and the need of the United States to conserve energy." Id. § 32902(f). In *Center for Biological Diversity v. NHTSA*, 538 F.3d 1172 (9th Cir. 2008), the Ninth Circuit reaffirmed NHTSA's discretion to consider economic factors in setting CAFE standards. EPCA "clearly requires the agency to consider these four factors, but it gives NHTSA discretion to decide how to balance the statutory factors—as long as NHTSA's balancing does not undermine the fundamental purpose of the EPCA: energy conservation." *Id.* at 1195.

NHTSA has interpreted the "economic practicability" consideration as

> Requiring the standards to be within the financial capability of the industry, but not so stringent as to threaten substantial economic hardship for the industry. A cost-benefit analysis would be useful in considering these factors, but sole reliance on such an analysis would be contrary to the mandate of the Act. *See* 42 FR 33534, June 30, 1977.

Accordingly, so long as the proposed CAFE standards do not compromise EPCA's underlying goal of conserving energy—which they do not, given the steady increase in the standard through the 2016 model year which would reach the statutory goal of 35 miles per gallon ahead of the 2020 model—NHTSA has wide discretion in how to factor today's significant economic conditions into its setting of the CAFE standard. It is entirely reasonable for NHTSA not to set standards at a level that would result in substantial harm to manufacturers, particularly in the current economic climate. AIAM believes NHTSA must have the ability to weigh and balance these matters, particularly in difficult economic times such as these, where the very existence of some of the automobile companies may be at stake.

B. Need For a Backstop Standard

AIAM opposes the adoption of an additional "backstop" (i.e., minimum conventional) standard as a means of preventing market shifts toward larger vehicles. A backstop standard would defeat the purpose of the attribute format by limiting the flexibility of manufacturers to respond to shifts in market demand. Moreover, when Congress considered the need for a backstop standard in the similar context of CAFE standards under EISA, it adopted a limited "minimum standard" for domestic passenger automobiles. The EISA backstop provisions require that a manufacturer's domestic passenger auto fleet must comply with the greater of 27.5 mpg and 92 percent of the combined domestic/import average fuel economy of all manufacturers. *See* EISA, section 102(b)(4). An additional backstop standard in an EPA greenhouse gas regulatory program would be inconsistent with Congress' intent and would be unnecessary and inappropriate.

In *Center for Biological Diversity v. NHTSA*, the Ninth Circuit held that "neither the EPCA's language nor structure explicitly requires NHTSA to adopt a backstop." Rather, the court held that NHTSA had abused its discretion in failing to adequately consider the "need of the nation to conserve energy," as it was required to do under 49 USC § 32902(f), and did not show that a backstop would be technologically infeasible or economically impracticable. EISA did not expressly change this. The only backstops required are the requirements in EISA that the combined car-truck fuel economy values reach 35 mpg by MY2020 and that the regulations established between MY2011 and MY2020 increase ratably to that goal. So long as NHTSA makes the showing that the standards meet these requirements, then nothing more should be required in terms of a backstop.

VI. Other Matters

A. Consumer Information

The proposed regulations seek comment on the potential use of metrics other than miles per gallon in consumer information regarding fuel efficiency. *See* preamble at 49576. Consumers perceive in-use fuel economy performance, measured in "miles per gallon," to vary greatly for higher efficiency vehicles, although the actual variation in fuel consumption is not as significant. This perception issue can result in customer dissatisfaction. In addition, consumers need more

significant and appropriate information for new technologies, such as plug-in hybrid (PHEV) and battery electric vehicles. In particular, PHEV fuel economy performance varies greatly depending on how the vehicle is used, potentially leading to customer misunderstanding. Therefore, a new consumer information label concept should be developed. AIAM would be pleased to work with EPA and NHTSA to develop consumer information requirements that include all appropriate information, are consumer friendly, and address greenhouse gas emissions as well as fuel efficiency matters.

B. Vehicle Classification

In its final rule establishing CAFE standards for MY 2011, NHTSA required that most 2WD SUVs would be classified as passenger cars. NHTSA did this by stating that it would not allow such vehicles to be classified as light trucks on the basis of the existence of a similar 4WD version. In addition, the agency eliminated the approach of basing a light truck classification on making rear seats in such vehicles "optional equipment." In the past this approach would enable a manufacturer to classify a family of vehicles as light trucks, on the basis of having greater cargo than passenger volume in the base version. In the 2012-2016 proposal, no vehicle classification changes are proposed. However, NHTSA invites comment on three approaches that it might consider for 2017 and thereafter:

- Moving minivans into the passenger car class, by deleting the "three rows of seats" criterion in the current regulation;
- Reconsidering the shift of 2WD SUVs into the passenger car class, if it appears that manufacturers respond to that shift by replacing those 2WD vehicles with less efficient 4WD versions; and
- More fundamental changes, requiring statutory amendments – adopting a single class for all vehicles, adopting multiple classes (e.g., sedan, coupe, sports, pickup truck, van, etc.), or classifying vehicles exclusively on the basis of their use (e.g., cargo hauling vs. passenger carrying).

AIAM opposes shifting minivans and 2WD SUVs with three rows of seats into the passenger car category. These vehicles frequently have high occupancy and high load characteristics comparable to light trucks, and they should be regulated accordingly. Nevertheless, if the agencies choose to shift these vehicles into the passenger auto category, they should provide adequate lead-time for manufacturers and adjust all standards accordingly to reflect the effect of the shift on the stringency of the standards.

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These NHTSA/EPA proposed regulations are an important step in implementing the new, harmonized national program for regulating motor vehicle fuel economy and greenhouse gas emissions that was announced by the Obama Administration on May 19, 2009. AIAM appreciates the opportunity to offer these comments and looks forward to working with both EPA and NHTSA to fully implement this important initiative.