

State of California  
California Environmental Protection Agency

AIR RESOURCES BOARD

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

**PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE  
EMISSION CONTROL AND SMOG INDEX LABELS REGULATION**

Public Hearing Date: June 21, 2007  
Agenda Item No.: 07-7-5

**I. GENERAL**

On October 6, 2005, Assembly Bill 1229 was signed into law (Chapter 575, now Health & Safety Code § 43200.1), which directs the Air Resources Board to review and revise the existing Smog Index Label and to develop a Global Warming Index. A summary of the requirements follows.

- No later than July 1, 2007, revise regulations relating to the smog index decal, to rename the existing decal and to provide specified smog forming, and global warming emissions information.
- Label is required to be effective for model year 2009 and subsequent model year new motor vehicles.
- Label is required for all passenger cars and light-duty trucks with a gross vehicle weight of 8,500 pounds and medium-duty passenger vehicles less than 10,000 pounds.
- Global warming index shall include emissions from vehicle operation and upstream emissions.
- Label shall include projected average vehicle emissions and lowest emission vehicle reference points.
- Label shall use at least one color ink in addition to black.
- Staff shall hold at least one public workshop.
- Staff shall seek input from automotive consumers, graphic design professionals, and other relevant labeling formats.

**1. Proposed Regulatory Amendments**

The rulemaking was initiated by the May 4, 2007 publication of a notice for a June 21-22, 2007, Air Resources Board (ARB or Board) public hearing to consider the proposed amendments. A Staff Report: Initial Statement of Reasons (staff report),

entitled “Proposed Amendments to the Smog Index Vehicle Emissions Label” was also made available for public review and comment starting May 4, 2007.

The staff report, which is incorporated by reference herein, describes the rationale for the proposed regulatory amendments to section (§) 1961 and §1965 of Title 13, California Code of Regulations (CCR) (and the documents incorporated by reference therein) to replace the existing smog index label with a new Environmental Performance label that scores both smog and global warming emissions from vehicles. Both smog and global warming scores range from 1-10 where 10 is the cleanest. The smog scores are based on the vehicle’s NMOG and NOx emissions as tested and certified through an Executive Order (EO) in accordance with § 1961, Title 13, CCR (LEV regulations). The global warming scores were proposed to be based on the vehicle’s CO<sub>2</sub>-equivalent emissions as tested and certified through an EO in accordance with § 1961.1, Title 13, CCR (Pavely regulations). Staff chose to use the § 1961.1 CO<sub>2</sub>-equivalent certification value to harmonize with existing ARB regulations and because the § 1961.1 CO<sub>2</sub>-equivalent certification value accounts for all global warming vehicle emissions (CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, and A/C refrigerants) and includes adjustments for upstream emissions based on fuel type. The new Environmental Performance label also uses a green border to attract consumer’s attention and provides written information on the effects of vehicle emissions, pointing to an ARB DriveClean website for more details.

ARB staff presented the regulatory changes as originally proposed in the staff report to the Board at the June 21, 2007, public hearing. In addition, staff also presented minor changes from the original staff report affecting label content and appearance. The following list summarizes those minor changes:

*Staff’s Proposed Modifications Presented at the June 21, 2007 Hearing*

- (a) Minor changes to the display and content of the label.
- (b) Replace the bi-fuel, dual-fuel and flex-fuel phrases with a single alternative-fuel phrase.
- (c) Add a dimensional tolerance to label requirements.
- (d) Modify label requirements to require that vehicles exempted from greenhouse gas requirements pursuant to Title 13, CCR, § 1961.1(a) – commonly referred to as “work trucks” – need only display the smog index score on the label.

Public testimony at the hearing urged the Board to consider a reduced size label that can be placed on a vehicle’s Monroney sticker.

## **2. The Board’s Action**

At the hearing, the Board adopted Resolution 07-26, approving the regulatory amendments as originally proposed in the staff report with staff’s proposed modifications and with authorization for the Executive Officer to propose additional conforming modifications as appropriate. The Board also authorized staff to make

additional regulatory amendments for an optional reduced sized label if placed on the Monroney sticker.

### **3. Notice of Public Availability of Modified Text and Availability of Additional Documents and Information**

In response to the Board's action, ARB staff prepared and released a public notice on December 7, 2007 that proposed additional amendments to the emission control and smog index label regulations and made additional documents available for review. All of the proposed modifications affected only the California Environmental Performance Label Specifications (CEPLS) for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles, a document incorporated by reference.

In addition to minor changes to the content and display of the label, the primary modification was to allow the display of a reduced label size, measuring no smaller than 2 ½ inches x 4 ½ inches, only if the reduced label is incorporated into the new vehicle Monroney sticker. The following list summarizes these changes:

*Staff's proposed modifications published in the December 7, 2007 public notice and subsequent 15-day comment period.*

- (a) Minor changes to the display and content of the label.
- (b) Modify label requirements to identify that the average projected Non-Methane Organic Gasses (NMOG) + Oxides of Nitrogen (NOx) emissions will be closest to an Ultra-Low Emission Vehicle (ULEV) certification.
- (c) Allow bar coding information to be displayed outside of the label.
- (d) Allow the use of an uncoated or coated color label.
- (e) Increase the side width of the green border.
- (f) Allow the use of a reduced label size when placed within the Monroney sticker.
- (g) Prohibit the use of green on the Monroney sticker near the label when placing the reduced size label on the Monroney sticker.

### **4. Waiver Denial**

On December 19, 2007, the United States Environmental Protection Agency (U.S. EPA) denied California the waiver needed to implement § 1961.1, Title 13, CCR, which requires certification of vehicles' greenhouse gas emissions to meet a declining fleet average standard. Portions of § 1961.1, Title 13, CCR are cited in these vehicle labeling regulatory amendments and certified test results were proposed for use to determine the global warming index for the new label. Without further clarification, ARB would have been unable to enforce the global warming portion of the new label and thus would not meet statutory requirements (Health and Safety code § 43200.1). Therefore, additional regulatory amendments were proposed to require an alternate method for reporting global warming emissions to

be applied to the label's global warming index, until U.S. EPA grants a waiver to enforce § 1961.1, Title 13, CCR.

## **5. Second Notice of Public Availability of Proposed Modified Text and Availability of Additional Documents and Information**

In response to comments made during the first 15-day comment period, and to address the waiver denial, on April 4, 2008, ARB staff prepared and released a public notice that proposed additional amendments to the emission control and smog index labels regulations and made additional documents available for review. All of the proposed modifications affected only the California Environmental Performance Label Specifications (CEPLS).

In addition to minor changes to the format and display of the label, the primary modification was to require an alternate method for calculating global warming emissions until California receives a waiver of federal preemption from U.S. EPA under the Clean Air Act, § 209(b), to enforce § 1961.1, Title 13, CCR. On April 16, 2008, ARB staff issued errata to the second notice to correct a calculation error in the equations used for determining air conditioning credits. The following list summarizes those changes:

*Staff's proposed modifications published in the April 4, 2007 second public notice, April 16, 2007 errata, and subsequent 15-day comment period.*

- (a) Minor changes to the display and content of the label.
- (b) Minor changes to the format and display of the label.
- (c) Establish an alternate method for reporting global warming emissions.
- (d) Allow bar coding, stocking, and other vehicle related information to be displayed on same label feedstock.
- (e) Clarify printer and label feedstock alignment tolerance.
- (f) Extend the implementation date.
- (g) Remove grid-connected hybrid electric vehicles as a multiple fuel vehicle.
- (h) Correct the Gross Vehicle Weight (GVW) rating of medium duty passenger vehicles.

## **6. Nonsubstantial Changes Made to the Final Regulation Order**

Primarily in response to issues raised by the Office of Administrative Law, ARB has made minor nonsubstantial changes to the final regulation order to correct an oversight in aligning a date with other dates adopted, to correct punctuation, grammar, incorporation by reference and reference citations, and to improve accuracy and clarity. The changes made do not materially alter any requirement, right responsibility, condition, prescription, or other regulatory element of any California Code of Regulations (CCR) provisions.

## Sunset Clause

At the beginning of the rulemaking process, a sunset clause was proposed for addition to the “California Smog Index Label Specification (CSILS) for 2004 and Subsequent Model Year Passenger Cars and Light-Duty Trucks,” a document referenced in Section 1965, Title 13, of the California Code of Regulations (CCR). This clause provides for the September 30, 2008 sunset of this document and the labeling requirements described within it to allow auto manufacturers to transition to the new labeling requirements as described in the replacement document “California Environmental Performance Label Specifications (CEPLS) for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.” In the second public notice of availability of modified text, a detailed discussion was presented and modifications were proposed to the CEPLS document, including providing a three-month extension of this transition date to December 31, 2008. However, because the focus of the substantive modifications in the second notice was on the CEPLS, the sunset clause in the CSILS document was not similarly modified in the release of the second public notice, and still displayed the October 1, 2008 date. Because of this, ARB aligned the date in the sunset clause, section 5 of the CSILS, to read:

5. **Sunset:** These specifications will sunset on December 31, 2008. All passenger cars and light-duty trucks manufactured on January 1, 2009 and thereafter must comply with the “California Environmental Performance Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles” incorporated by reference in Title 13 California Code of Regulations § 1965.

This change furthers the intent of the Board and the expectation of affected stakeholders. In the original public notice and proposed regulatory text it was clear that the sunset of the CSILS on September 30, 2008 was to be immediately succeeded by the onset and applicability of the CEPLS on October 1, 2008, the latter containing the new label including smog index information previously found on the CSILS. As discussed at p. 26 of the Staff Report: Initial Statement of Reasons, the October 1 date was proposed to address manufacturers’ lead time concerns. The Board approved this provision. The first public notice of availability of modified text made no change to the sunset/onset dates because at that time no change was needed. By the time of the second notice, additional lead time was needed. Therefore the CEPLS was modified to apply beginning on January 1, 2009. ARB received no comments regarding this modification, therefore this modification was accepted by all affected stakeholders. There is no expression anywhere of any intent to create a three month regulatory gap where neither CSILS nor CEPLS would apply. On the contrary, the Board and staff’s original intent to have the CSILS sunset immediately before the CEPLS apply remains intact, and therefore ARB made this conforming change to align with the CEPLS by sunsetting the CSILS on December 31, 2008.

## **Grammatical Corrections**

Grammatical corrections were made to the final regulatory documents to improve clarity such as, among others, adding the word “Label” to the title of specific citations of the CEPLS document and to replace the word “than” with “then” in the first sentence of section 3.(a)(2)(B) of the CEPLS document.

## **Incorporations by Reference**

All references to the Pantone Formula Guide in the regulatory documents were modified to include the most current year the referenced guide was last updated. The Pantone Formula Guide, product #GP1201 was last updated in 2007. This was the version made available during the first 15-day comment period and which is included in the rulemaking file. In addition, the phrase “incorporated by reference herein” was added to the end of the sentence in section 3.(a)(2)(B)ii.2. of the CEPLS document as it refers to the SAE J2727 test procedure. Again, this was the version made available during the second 15-day comment period and which is included in the rulemaking file.

## **Consistency**

In section 2.(b)(4) of the CEPLS, the phrase “are not used” was replaced with the phrase “must not be used” in order to be consistent with the phrase in section 2.(a)(5) of the same document. These parallel provisions were noticed for comment at the same time and were both clearly intended to prohibit the use of certain color ranges of green in the Pantone Formula Guide. Similarly, in sample label Attachment B to the CEPLS, we replaced the 0.3056 inch measurement in Item 1 with the 0.3125 inch value noticed at the same time for section 7.(a)(2) of the CEPLS.

## **7. Documents Incorporated by Reference in Proposed Regulation**

The following documents have been modified or created new that will be incorporated by reference in § 1961 and § 1965, Title 13, CCR. Of the three primary documents, the new document (b) identifies three second tier documents to be further incorporated by reference therein.

- (a) California Smog Index Label Specifications for 2004 through 2009 Model Year Passenger Cars and Light-Duty Trucks. (Modified).
- (b) California Environmental Performance Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles. (New).
  - (1) Pantone Formula Guide, product #GP1201 (2007)
  - (2) ARB Mailout, MSO #2007-03, dated August 29, 2007
  - (3) SAE International Standard J2727, revised July 2007

- (c) California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles. (Modified).

These are all highly technical documents serving a limited audience and of interest and use only to highly specialized personnel within the regulated entities. Given their length, detail, and complexity, it would be cumbersome and impractical to repeat their contents in their entirety in the Code of Regulations. Items (a) and (c) have been incorporated by reference for years and are modified here only to point to the new version of the labeling requirements in (b). And item (b) in particular provides an extremely detailed listing of font, size, and style requirements that would serve little use in the Code and could be difficult to reproduce there.

All of the documents incorporated by reference were made available upon request directly from the agency and were available via the agency's web site for this rulemaking, as documented in the original public hearing notice and the first and second 15-day notices.

## **8. Fiscal Impacts**

Pursuant to Government Code sections 11346.9(a)(2) , 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.

## **9. Consideration of Alternatives**

The Board has further determined that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of 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 or small businesses than the action taken by the Board.

## **10. Local Agencies and School Districts**

As noted in the initial statement of reasons and documented in the Economic and Fiscal Impact Statement accompanying this rulemaking, this regulatory action does not impose a mandate on local agencies or school districts.

## II. SUMMARY OF PUBLIC COMMENTS AND ARB RESPONSE

In response to the May 4, 2007 publication of the staff report and subsequent 45-Day public comment period, the Board received written comments from:

Raney, David	American Honda Motor Company, Inc. (Honda)
Douglas, Steven	Alliance of Automobile Manufacturers (AAM)
Cabaniss, John	Association of International Automobile Manufacturers (AIAM)
Babbidge, Tracy	Connecticut Department of Environmental Protection
Knapp, Jamie	Environmental Coalition (EC) of the following organizations:
Holmes-Gen, Bonnie	American Lung Association of California
Rusch, Emily	California Public Interest Research Group (CalPIRG)
Shears, John	Center for Energy Efficiency and Renewable Technologies (CEERT)
Plenys, Tom	Coalition for Clean Air
Barbose, Jason	Environment California
Fugere, Danielle	Friends of the Earth
Frank, Susan	Steven and Michelle Kirsch Foundation
Tonachel, Luke	Natural Resources Defense Council
Vander Sluis, Matt	Planning and Conservation League
Quong, Spencer	Union of Concerned Scientists (UCS)

At the June 21, 2007, board hearing, oral testimony was presented by:

Douglas, Steven	Alliance of Automotive Manufacturers (AAM)
Kenausis, Kristin	United States Environmental Protection Agency
Raney, David*	American Honda Motor Company, Inc. (Honda)
Monzlan, Patricia	Union of Concerned Scientists (UCS)
Cabaniss, John	Association of International Automobile Manufacturers (AIAM)
Patterson, David	Mitsubishi Motors R&D of America, Inc. (Mitsubishi)

The individual listed above with an asterisk (\*) also submitted presentation slides.

In response to the December 7, 2007 notice of public availability of modified text and availability of additional documents and information, and subsequent 15-Day public comment period, the Board received written comments from:

Collins, Tom	Public Citizen
Samaras, Apostolos	Public Citizen
Cingi, Corrado	Ferrari, S.p.A. (Ferrari)
Douglas, Steven	Alliance of Automotive Manufacturers

In response to the April 4, 2007 second notice of public availability of modified text and availability of additional documents and information, and April 16, 2007 errata to the

second notice, and subsequent 15-Day public comment period, the Board received written comments from:

Fidler, Thomas	Pennsylvania Department of Environmental Protection
Champlin, Nathan	Grammer correction
Quong, Spencer	UCS/NRDC
Fidler, Thomas	Pennsylvania Department of Environmental Protection
Douglas, Steven	Alliance of Automotive Manufacturers (AAM)
Raney, David	American Honda Motor Company, Inc. (Honda)

Set forth below is at least a summary of and in most cases a verbatim copy of each public comment submitted as an objection or recommendation made regarding the specific adoption, amendment, or repeal proposed, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change. Responses are provided only to objections or recommendations directed at the agency's proposed action or the procedures followed by ARB in proposing or adopting the action. Repetitive or irrelevant comments have been summarized and grouped for ease of response. A comment is "irrelevant" if it is not specifically directed at the proposed action or to the procedures followed by ARB in proposing or adopting the action. The comments have been grouped by topic whenever applicable.

#### **1. Summary Of Written Comments Submitted Regarding the Regulations as Proposed in the May 4, 2007 Staff Report And Verbal Comments Made At The June 21, 2007 Board Hearing, with ARB Response.**

##### (a) Size, Consistency, and Placement of New Label

- (1) Written Comment: (EC) We strongly support the label size requirement. A consistently-formatted, 6 x 4 inch label on all vehicles helps ensure that the Environmental Performance label will clearly stand out and be easily recognized by vehicle buyers, even when shopping across different vehicle brands and models.
- (2) Verbal Comment: (UCS) Thank you for the opportunity to speak today on the revised emission control and Smog Index labels. USC would like to commend staff for producing a label design that is clear and easy to understand. And which we hope will help the consumer make smart vehicle choices. We hope this program will impact consumer choice and manufacturer in the same way that the Energy Star program has helped consumers make better choices around home products.

USC strongly supports the size of the label because it will be easily seen and recognized by the consumer. We haven't had the benefit of seeing the proposal that Honda has made, but it's reassuring to hear that you all think that it's equally visible.

(3) Written Comment: (Honda) We have goals that are common with those of CARB staff such as:

- Consistency in design of labels used by all manufacturers, as much as possible
- Label placement on the vehicle should be as consistent as possible
- New label should be larger than the current Smog Index Label

The current Staff proposal requires that the new label be a minimum 4" x 6" in size, which is prohibitively large in that it does NOT allow integration of this label into the new car sticker or Monroney Label. Our proposal would provide manufacturers with an option of integrating the new label and information into the new car sticker or Monroney Label, as long as the label size was 2.5" x 4.5" or larger. Alternatively, a manufacture could apply a label separate from the Monroney Label of the proposed 4" x 6" size.

Honda arrived at the size of 2.5" x 4.5" with significant effort by our graphics design team responsible for all of our labels today and in the past. This dimension was reached because of the restrictions on label space primarily from the EPA fuel economy section, Stars for Cars on label size requirements, domestic parts content information, vehicle specification and pricing section. Obviously, there is a lot of "competition" for space on the Monroney Label. It is viewed by many to be the focal point of information to be communicated to the consumer. Nevertheless, we believe this is a reasonable and very noticeable size of label and still proportionate to the larger 4" x 6" label originally proposed.

(4) Verbal Comment: (Honda) But the main challenge that we have, and that's what I'm going to address now, is that the size of the label inherently prohibits us from putting this label on the Monroney label. And we happen to believe that that is the most important point. It is the one point that a consumer goes to when first enters a showroom, he wants to know what the price of the car is and what that price brings. So we believe that it's important to try to capture that moment when the individual buyer is looking at the vehicle for the first time. And we believe that that will be captured, that the fuel efficiency information, greenhouse gas information, would be captured at that the moment if, indeed, this information is on the label itself.

What you have in front of you, the staff saw for the first time last week. This is the first time you've seen this. And I took this to our graphic design team, our product planning people, and our sales people, and I was able to squeeze every last inch of, millimeter of space out of this Monroney label that I can. As you can imagine, it's very important geography.

So the way we came up with two and a half by four and a half inches, this is the maximum amount that I can get with all the other information that's required. You have a slide there in front of you that depicts really what governs that. The fuel economy label mandated by EPA is governed by regulation. And the Cars for Stars information, the safety and crash test information is governed by regulation, Congressional mandate. The Domestic Parts Content information is governed by the font size. So we're a bit it challenged there. So there's not much space left and that's where we ended up with a two and a half by four and a half number.

There was mentioned earlier that this would go in all 50 states. Fifty state models. From our perspective, we've been doing that with the Smog Index Label. But if you allow us to do this, we would continue to do that in all 50 states. That would not be the case if we had to go to a separate label. It would only be for California. So I think you would lose something there.

I have had some conversations with staff after we submitted this and there's been some concerns that the document that you have in front of you, the font size may be a bit small. And as early as this morning, I talked to our graphic design team again, and they can go as far as nine point, maybe even ten. Nine point size is reference to nine point size is what you see in the vehicle specifications section right now. So we can go to that size. And still keep within the two and a half and four and a half inch boundaries.

So what we would propose to you is to give us an option. If manufacturers still wanted to go to a separate label, I'm not going to debate four by six or three by five. I have a point about that, though. But my main point is to give us the option to continue to use the Monroney label, which we strongly believe is important for consumer.

On the three by five point, I would draw your attention -- and I'm sorry, I'm running over here -- but I would draw your attention to the one slide that we have in front of you on the Acura TL. It's, I think, two slides from the end in your handout. The photograph of an actual application. We applied the existing Monroney label, well, actually the modified one with our two and a half by four and a half inch size. We applied that to the rear left-side door and also put the four by six label on it. And can you see they don't fit. We would be forced to move the four by six label to the front windshield in this case. Which I, inarguably, the Acura TL is not a small sedan. It's a medium size car. So I think you'll see this in many different cases. And I don't want to be critical of staff, but I think this is important and our product planning team reinforced this when I asked them about focus groups. It's absolutely imperative when you do a focus group to show the feature you're trying to get a reaction from, show it on the car.

And as far as I understand, the focus groups did not have that opportunity, the labels were never placed on a car, they were given paragraphs, but not shown the labels on a vehicles itself. And this is what we ran into when we actually tried to show why this would work in the real world.

If you reduce the separate label or the label itself down to three by five, you might be able to fit that on the TL. We did not try that. If you had to go to a separate label.

- (5) Written Comment: (AIAM) We believe CARB should provide flexibility for a smaller label for manufacturers which are planning to integrate the CARB label into the Monroney label. Given the space limitations on the Monroney label, it is difficult, if not impossible, for manufacturers to allocate a 4" x 6" space for the CARB label. A minimum label size could still be required; AIAM recommends a minimum label size of 2.5" x 4.5" if the CARB label is integrated into the Monroney label.
- (6) Written Comment: (AAM) The Alliance believes the label could be made somewhat smaller to improve visibility and safety during test drives without taking away from the label's visibility, and suggests 5 inches width x 3 inches height.
- (7) Verbal Comment: (AAM) For label size, we believe that, as has been pointed out, that the label is too large, that a four by six is too large, and the concern is the visibility when doing test drives. There is a number of federal and state requirements and the number of different labels that manufacturers must put on the vehicle and that does reduce visibility. We've recommended a three by five inch size.

However, we could also support Honda's recommendation. I looked at their comments and it was two and a half by four and a half inches.

If this was either allowed or if it was mandated for both -- if the label is placed on the Monroney label or if it's a separate label, and we base this recommendation of consistency for three reasons.

First, it would provide consistency in both the content of the label as well as the size, but regardless of where it's placed.

Second, we believe that a separate label is as visible, if not more so, than one that's incorporated into an existing Monroney label.

And finally, if visibility is concern, and we certainly believe it is, then it would make little sense to -- to -- for a separate label to require a larger one than one that's incorporated in the Monroney label.

So that concludes my comments. We -- again, we appreciate the staff's work on this. And we ask for a consistent label size and that label size being smaller, either three by five or, as Honda recommends, 2.5 by 4.5.

- (8) Verbal Comment: (Mitsubishi) While I agree with many of the things that Mr. Raney was talking about here, I want to caution the Board that for our manufacturer, we cannot fit even the smaller size on our Monroney label. As you know, from Mr. Raney's presentation, there's many regulatory requirements and there's also internal corporate requirements of what logos need to be on the Monroney label. I only know this information as we went through this with the recent change to the CAFE requirement label for the EPA. And I know that the real estate on the Monroney label is very valuable. And we don't have enough to put a new Smog Index Label onto our Monroney label. I talked to a couple of other manufacturers just now, before I came up here, and there's other manufacturers in the same situation.

We do like this as an option. If Honda's able to do this, I think it can be effective. We would like to have the option to have a similar size label that we are able to attach. The six by four label is a large label to try the attach to the side of a car, in the limited window space that there's available. So a smaller label as we, as the Alliance has put forth in their proposal, three by five or somewhere around there, we would appreciate that.

ARB Response: Based on written comments and public testimony heard at the June 21, 2007 public hearing, the Board directed staff to consider the display of a reduced label size, measuring no smaller than 2 ½ inches x 4 ½ inches, only if the reduced text size was still readable by consumers and if the label could be incorporated into the Monroney sticker required federally on all new motor vehicles at point of sale. Staff first reduced the size of the label from a 4 x 6 inch label down to a 2 ½ x 4 ½ inch label in order to understand label display and character size. Staff then used the largest character size possible to fit within the new label 2 ½ x 4 ½ inch constraints. Staff was able to produce an alternate label measuring 2 ½ x 4 ½ inches that is readable at a reasonable distance by consumers. Based on staff's findings, new specifications were developed for the alternate size label to be incorporated into the Monroney sticker and were proposed for addition in the December 7, 2007 public notice. In response to that notice ARB received no negative comment regarding either the reduced size chosen for the alternative label size or its placement within the Monroney label.

(b) Color Labels

- (1) Written Comment: (Honda) We have goals that are common with those of CARB staff such as:
- Label should be highly noticeable, simple, and easy to read

- Visibility should be enhanced by use of color and contrast
- (2) Written Comment: (AAM) None of the Alliance members have indicated that they plan to upgrade to color printers in the next three years and, based on their comments at the workshop, Honda does not plan an immediate upgrade either. It is not just a question of installing color printers in the plants. Some manufacturers labeling systems are not capable of color printing, and the entire system would need to be changed, taking much longer than three years. In the mean time, we recommend making the terms “Global Warming Score” and “Smog Score” black ink. This helps manufacturers with alignment and seems to make the label more readable.
  - (3) Written Comment: (AIAM) AIAM was initially concerned that requiring two-color labels would create extra expense and other difficulties. However, we now believe that most manufacturers will be able to comply by having the needed colored portions of the label pre-printed on the label print stocks, resulting in little extra cost for having the two-color label. In nearly all cases, the current assembly line printing process will be unchanged.

ARB Response: The new label as proposed allows manufacturers to either use color ink printers to print the new labels or use black ink printers with pre-printed color label feed stock to provide the color source. Staff made sure that the use of color on the label was reserved for printed information that was constant among all labels. All variable information will be printed in black. As pointed out in these comments, this is an acceptable alternative to purchasing color printers.

(c) Federal Preemption for Scoring Green House Gas Emissions

- (1) Written Comment: (AAM) The federal Corporate Average Fuel Economy statute expressly provides that with a federal fuel economy labeling standard in place, “a State or political subdivision of a State may adopt or enforce a law or regulation on disclosure of fuel economy or fuel operating costs ...only if the law or regulation is identical to that [federal] requirement.” 49 U.S.C. 32919 (1994). A Federal fuel economy labeling regulation has been in place since the 1977 model year. The proposed global warming score clearly does not comport with this identity requirement. Our comments on the Global Warming Score should, therefore, not be construed to endorse the proposed regulations or to imply that California has the legal authority to require automakers to provide a separate greenhouse gas emissions label. Alliance of Automobile Manufacturers (Alliance), June 19, 2007.

- (2) Written Comment: (AIAM) As we have noted many times in the public record, GHG emissions from vehicles are primarily a function of fuel consumption. In fact, every gallon of gasoline burned in a vehicle results in about 20 pounds of carbon dioxide emissions, one of the primary GHG of concern. Carbon dioxide emissions account for approximately 95 percent of the GHG emissions from vehicles. Therefore, the GHG emissions of a vehicle are directly related to and inextricably tied to that vehicle's fuel economy. Pursuant to 49 U.S.C. section 32908, the U.S. Environmental Protection Agency (EPA) has required manufacturers to label new vehicles since the 1975 MY with fuel economy information. Such information is directly correlated to GHG emissions and has been available to consumers for over 30 years. In addition, EPA's fuel economy ([www.epa.gov/fueleconomy](http://www.epa.gov/fueleconomy)) and green vehicle ([www.epa.gov/greenvehicles](http://www.epa.gov/greenvehicles)) websites, which millions of consumers use each year, reinforce the linkage between fuel economy and GHG emissions.

Labeling requirements for disclosure of fuel economy information are governed by federal law. Section 32919 of Title 49 of the U.S. Code, subsection (b) reads as follows (emphasis added):

- (b) Requirements Must Be Identical. - When a requirement under section 32908 of this title is in effect, a State or a political subdivision of a State may adopt or enforce a law or regulation on disclosure of fuel economy or fuel operating costs for an automobile covered by section 32908 **only if the law or regulation is identical to that requirement.**

CARB's GHG emissions labeling requirements, as currently drafted, therefore, could be construed as preempted under federal law because they are not identical. This is particularly problematic here due to the specific reference to and reliance by CARB on the California AB 1493 GHG emissions regulations currently under legal challenge in various federal courts. Alliance of International Automobile Manufacturers (AIAM), June 19, 2007.

ARB Response: The ARB disagrees with these comments and believes that the adopted environmental performance labeling regulations are not preempted by Title 49, United States Code, Section 32919(b).

To begin, both commenters cite statutory preemption language that on its face does not apply to the labeling regulations adopted here. Section 32919, subsection (b) requires State requirements on the disclosure of "fuel economy" or "fuel operating costs" to be identical to any applicable federal labeling requirements in effect under U.S. EPA's 40 C.F.R. Part 600 regulations implementing 49 U.S.C. § 32908(b). Here the adopted regulations do not

require disclosure of fuel economy, which is statutorily defined in terms of average miles per gallon of fuel used (49 U.S.C. § 32901(a)(10)) and interpreted the same by U.S. EPA. See 40 C.F.R. §§ 600.302, 600.002(a)(10). The regulations adopted here instead require the disclosure of a vehicle's greenhouse gas emissions compared to other vehicles' greenhouse gas emissions in that same model year. And the adopted regulations have no requirement to disclose operating costs for fuel or any other metric.

AIAM's comment about its many entries in the public record does not apply to this rulemaking, for which ARB has only this AIAM comment and is responding accordingly. While not stated explicitly, it appears that the AIAM comment is attempting to raise express and implied preemption claims similar to those they (and the Alliance) raised unsuccessfully as plaintiffs in two federal district court actions challenging California's motor vehicle greenhouse gas emission standards adopted in 2005 pursuant to AB 1493 (Chap. 200, Stats. 2002 (Pavley).) There are two fatal flaws with this line of argument.

First, the "linkage" that AIAM attempts to establish between CO<sub>2</sub> emissions and fuel economy is arguably irrelevant to a challenge under 49 U.S.C. § 32919(b). Section 32919(b) does not have the "related to" language in 49 U.S.C. § 32919(a) that plaintiffs have argued creates a broad preemptive effect on state standards. The language in § 32919(b) is obviously more tightly constrained, speaking to requiring identity to specific fuel economy label requirements in effect, rather than preempting laws or regulations "related to" such requirements. (While the recently enacted energy bill will at some point put new federal greenhouse labeling requirements "in effect," those regulations are not at even the proposal stage and are years away. H.R. 6, 2008, Section 105.) A court should view the absence of the "related to" language in (b) – directly following and in the same Section 32919 that addresses state and local preemption in (a) – as a meaningful and intentional distinction.

Second, even if the express or implied preemption arguments plaintiffs – commenters here – raised in the context of § 32919(a) preemption arguably applied here, those arguments were rejected by two federal district courts. In one action plaintiffs challenged Vermont's adoption of greenhouse gas emission standards pursuant to its authority under Clean Air Act Section 177. *Green Mountain Chrysler et al. v. Crombie*, 508 F.Supp.2d 295 (2007) (U.S. Dist Ct. VT). After first holding that preemption does not even apply (*id.* at 343-50), the court held that the Energy Policy and Conservation Act of 1975 (EPCA) does not expressly preempt Vermont's greenhouse gas standards, both because there is not a one-to-one correspondence between greenhouse gas emissions and fuel economy, and because Congress did not clearly intend EPCA to displace emissions regulations affecting fuel economy. *Id.* at pp. 351-54. For similar reasons, there was no field preemption. *Id.* at pp. 354-55. And the court also held there was no implied conflict preemption because the regulations do not frustrate Congressional intent, and because after an extensive trial, the

court found plaintiffs had not met their burden to demonstrate that the technological feasibility and economic practicability of compliance with Vermont's greenhouse gas regulations stands as an obstacle to EPCA's objectives. *Id.* at pp. 355-92.

In another action in which the plaintiffs – again, commenters here – raised virtually identical EPCA preemption claims directly against the ARB regulations in California, the court took a slightly different analytical approach result but similarly found no preemption, this time on summary judgment motions without trial. *Central Valley Chrysler-Jeep et al. v. Goldstene*, 529 F.Supp.2d 1151 (2007) (U.S. Dist. Ct. E. Dist of CA). Here the court carefully evaluated the interplay between the emissions control function of the Clean Air Act and EPCA's mileage-setting authority. The court concluded that neither EPA nor California are precluded from setting emission standards that may incidentally improve fuel economy, and it is NHTSA that must conform its CAFÉ mileage standards accordingly. *Id.* at 1165-74. The court held further that § 32919(a) must be read narrowly and does not expressly preempt the regulations, especially given the lack of one-to-one correspondence. *Id.* at 1174-76. Finally, the court found no implied conflict preemption, instead finding that the greenhouse gas benefits of state greenhouse gas reductions under the Clean Air Act are actually aligned with federal fuel economy regulation, and the “economic practicability” criterion NHTSA applies under EPCA is not so different from what EPA (and ARB) apply in reviewing technologies and costs under the Clean Air Act as to cause a conflict with the purposes and objectives of EPCA. *Id.* at 1176-79.

To date then, federal courts have rejected commenters' claims that regulations targeting greenhouse gas emission reductions from motor vehicles are expressly or impliedly preempted by EPCA. Again, the courts' reasoning applies equally if not more so here, given the absence of “related to” language mentioned earlier.

It is also worth noting that the same EPA that AIAM states has been implementing Section 32908 since the 1975 MY – and would presumably be in a position to express the federal government's opposition to these regulations on preemption grounds – testified in support of the adopted regulations. See June 21, 2007 Hearing Transcript at p. 319. And NHTSA, which did not comment here, has interpreted EPA's labeling rule to not impact CAFÉ standards or test procedures, vehicle weight, or the fuel economy level that a vehicle can achieve. Notice of Proposed Rulemaking, Average Fuel Economy Standards Passenger Cars and Light Trucks Model Years 2011-2015 April 21, 2008, p. 306. Thus the two federal agencies potentially concerned with state preemption issues suggest that neither EPCA's general preemption provision nor its specific labeling preemption provision could possibly have the broad preemptive effect on state greenhouse gas emissions labeling requirements that these commenters impliedly assert.

Finally, ARB notes that the specific reference to the California AB 1493 GHG emissions regulations, which AIAM finds problematic, does not apply to the initial implementation period for these regulations, i.e., before California receives a waiver for its AB 1493 regulations from EPA. In this initial period, greenhouse gas scores will be calculated based primarily on data manufacturers already provide to ARB pursuant to AB 32 (Chap. 488, Stats. 2006). And if and when the AB 1493 GHG regulations do receive a waiver from EPA, as described above the courts have found EPCA to be no further impediment to AB 1493 implementation.

(d) Global Warming Score

- (1) Written Comment: (AAM) Since the AB 1493 regulations are a fleet average, manufacturers may officially certify their vehicles throughout the model year. Put another way, manufacturers may optionally test their vehicles pursuant to 13 CCR §1961.1(a)(1)(B) after the label is developed or even long after the vehicles are sold provided they do so before the end of the reporting model year. Based on the optimal testing the final CO<sub>2</sub>Equivalent value for the vehicle may differ from the value on which the label is based. Consequently, we recommend deleting “and certified pursuant thereto” from Section 3(a) on page A-5 of the Initial Statement of Reasons. The Global Warming Score would still be calculated according to the 13 CCR §1961.1(a)(1)(B).

ARB Response: The scores used on the new label must be certified by ARB to provide the public with accurate and reliable information. If a vehicle manufacturer opts to re-test a specific make and model in order to reduce fleet averaging of emissions, then the new test data would be used to generate the label scores. Further, following the second 15-day comment period, this comment no longer applies to the interim period before California receives a waiver to enforce its AB 1493 regulations.

(e) Work Trucks

- (1) Written comment: (AAM) The method for calculating a vehicle’s global warming score is contained in 13 CCR §1961.1(a)(1)(B). However, 13 CCR §1961.1(a) specifically exempts “Option 1 LEV II NO<sub>x</sub>” certified vehicles from the AB 1493 requirements. Although we believe that it is staff’s intent to exempt the few trucks certified under the Option 1 LEV II NO<sub>x</sub> standard from this regulation (otherwise, the cost of the labeling regulation would need to include the cost of additional testing), we recommend ARB specifically acknowledge this by revising paragraph 3(c) to read, “The scores in the following table shall apply to all passenger cars and light-duty trucks 0-8,500 pounds GVW and medium-duty passenger vehicles 8,500-10,000 GVW. Except no Global Warming Score is required

for vehicles exempted under 13 CCR §1961.1(a) from the greenhouse gas emission requirements.”

ARB Response: Title 13, CCR, § 1961.1(a) allows an exemption from testing and reporting fleet average greenhouse gas exhaust mass emissions for light-duty trucks from 3751 pounds Loaded Vehicle Weight (LVW) up to 8500 pounds Gross Vehicle Weight (GVW) that are certified to the Option 1 LEV II NOx Standard in Title 13, CCR, § 1961(a)(1). Vehicles so certifying are commonly referred to as light-duty “work trucks.” A manufacturer may certify up to 4 percent of its light-duty truck fleet from 3751 pounds LVW – 8500 pounds GVW with a maximum base payload of 2500 pounds or more to the Option 1 LEV II NOx standard. Therefore, additional regulatory language was proposed in the December 7, 2007 public notice to specifically address this exemption. ARB received no negative comment on this proposal, which is now part of the adopted regulation.

(f) Alternative Fueled Vehicle Statement

- (1) Written comment: (AAM) Paragraphs (19), (20), and (21) in Section 6(b) of the CEPLS specify three different statements regarding bi-fuel, flex-fuel, and dual-fuel vehicles. However, the statements all simply refer the vehicle owner to the **www.driveclean.ca.gov** website. We recommend replacing the three statements with one stating, “For Alternative Fueled Vehicles, when using the alternative fuel, scores may improve. See **www.driveclean.ca.gov**.”

ARB Response: The three different bi-fuel, flex-fuel and dual-fuel phrase requirements were deleted and replaced with a single alternative fuel phrase requirement which will be printed on the label of vehicles capable of operating on more than one fuel. This change was proposed in the December 7, 2007 public notice. ARB received no negative comment on this proposal, which is now part of the adopted regulation.

(g) Label Tolerances

- (1) Written comment: (AAM) The Environmental Performance Label format requirements in the proposed regulation specify exact positioning of each piece of information on the label. The Alliance requests that tolerances be added to the proposed format requirements, particularly for positioning relative to the edge of the label. The Alliance suggests a tolerance of + or – 1 mm. This small but necessary tolerance would not detract from the ARB’s desire to have all label formats appear to be identical to each other. This tolerance would take into account slight size differences of individual papers in the paper stock and paper shifts in the printer feed trays.

ARB Response: ARB staff agrees and a 1.0 millimeter dimensional tolerance was proposed to allow for potential differences in printer accuracy and label feedstock alignment during printing. The 1.0 millimeter tolerance was proposed in the December 7, 2007 public notice. ARB received no negative comment on this proposal, which is now part of the adopted regulation.

(h) Bar Code Information

- (1) Written comment: (AAM) The Alliance understands that manufacturers may place the VIN and/or bar code outside of the 6 x 4 inch regulated area. This is needed by manufacturers for quality control purposes, i.e., to verify that the correct label has been installed on the vehicle.

ARB Response: Staff agrees that label ordering and inventory flexibility among manufacturers is needed. Therefore, proposed modifications were made to allow expansion of the Environmental Performance label to include bar coding information. The December 7, 2007 public notice proposed modifications to allow for inclusion of bar coding information on the label if the bar coding information is placed outside the label's perimeter. ARB received no negative comment on this proposal, which is now part of the adopted regulation.

(i) Lead Time

- (1) Written comment: (AAM) The Alliance requests that the regulation begin with 2009 model year vehicles produced on January 1, 2009 or later instead of October 1, 2008. Two additional months of lead-time are needed given that the regulation may not be finalized until February 2008. The additional lead-time is needed to allow manufacturers to properly implement the label in all assembly plants and ports. The Alliance supports the Staff's proposal to allow the Environmental Performance label to be implemented early and concurrently with the existing smog index label to allow plants to conduct the necessary testing and validation of this new labeling process.
- (2) Verbal comment: (AAM) For the lead time, we do appreciate the staff has provided us to October the 1st of 2008. That gives us time to test out labels on 2009 model year cars. And, however, we've, we still recommend an additional three months to January the 1st to allow for a smoother and more cost-effective implementation. So that is our recommendation on lead time.

So that concludes my comments. We -- again, we appreciate the staff's work on this. And just to summarize, we ask for an additional three months of lead time.

- (3) Written comment: (AIAM) AIAM can support an effective date of October 1, 2008. We believe it provides manufacturers sufficient lead-time to modify applicable labels, order new print stocks, use up old print stocks, and implement any needed assembly line changes. However, we recommend it be amended to allow manufacturers the option of opting into the new labeling program voluntarily earlier than October 1, 2008.

ARB Response: Based on information received from several manufacturers, ARB staff was able to verify that label transition from the old Smog index to the new Environmental Performance indices requires at most six months lead-time. And similar to the AIAM comment above, most manufacturers are interested in transitioning sooner than the October 1, 2008 effective date first proposed; the proposed and now adopted regulations already provided for early implementation. Therefore, no modifications were made. And subsequent to these comments, staff proposed a January 1, 2009 effective date as AAM requested, and this is now finalized in the adopted regulation.

(j) Global Warming Scoring Changes

- (1) Written comment: (EC) We urge ARB to closely monitor and update the label as necessary to keep it useful to consumers. Due primarily to California's vehicle greenhouse gas emission standards, the cars and light trucks sold in the state are expected to become cleaner on average with each model year. As a result, ARB estimates that the global warming score, in particular, will have a higher average value across the new vehicle fleet by model year 2012. This will cause global warming scores across vehicles to bunch up toward the top of the scale. The shift to cleaner vehicles may occur sooner, however, and we urge the staff to annually analyze both the smog forming and greenhouse gas emissions from each new model year and revise the label before 2012, if necessary, to ensure that vehicles with average emissions continue to be scored in the middle of the pollution scale. This ensures that dealers can differentiate and consumers can clearly identify the cleanest vehicles with each new model year.
- (2) Verbal comments: (UCS) We expect to see a reduction in smog and global warming pollution from vehicles in the next few years because of the implementation of various regulations and we're glad to hear that CARB will be revising the – or evaluating on a periodic basis to make sure there's no grade inflation.
- (3) Written comment: (AAM) It is possible, and in fact likely, that two vehicles identical in all respects except MY (model year), will have different environmental performance scores for no other reason than changes to the scoring. While it might be necessary to make changes to the label at some point, we recommend severely limiting those changes. When

changes are deemed necessary and appropriate, ARB should provide manufacturers at least two full model years of lead time for significant changes.

ARB Response: The staff report recommends that incremental improvements in vehicle efficiency would skew the current global warming scale around the 2012 model year time frame. Therefore, staff will be monitoring the distribution of scores and will initiate appropriate changes to the scoring system if needed. In accordance with rulemaking policies, staff will notify and engage with all stakeholders when making appropriate changes and will incorporate adequate lead-time for implementation.

(k) Cost of making labels

- (1) Written comment: (AIAM) For certain imported vehicles, labels are applied at the port of entry by outside contractors. In this case costs for applying labels at the port are generally on a cost per label basis. Therefore, if CARB label cannot be integrated into the Monroney label, there will be additional costs associated with applying the separate CARB label for those manufacturers.

ARB Response: Based on previous comments and the Board's directive, ARB staff was able to create a reduced size label that can be incorporated into the Monroney sticker. The various manufacturers will be able to choose the label that best meets their operational and manufacturing needs, and reduce or eliminate the additional costs of concern.

(l) Harmonize with US EPA

- (1) Written comment: (AIAM) We request that CARB base its 1-10 GHG ratings on carbon dioxide values arithmetically derived from EPA's approved fuel economy label values for each vehicle model in lieu of or as an option for the methods proposed by CARB. The process we envision would work as follows:
- Auto manufacturers would collect the necessary data during vehicle certification to determine fuel economy.
  - Manufacturers would submit proposed fuel economy label values to EPA for approval.
  - Once approved, the fuel economy values would be arithmetically converted using EPA's prescribed formula to a carbon dioxide value. The 1-10 rating scale could be determined via a conversion table either directly from the fuel economy label value or the equivalent carbon dioxide value.
- (2) Verbal comment: (AIAM) Specifically, we request that manufacturers be allowed the option to have the one to ten greenhouse gas ratings based

on EPA's fuel economy label values that are developed through the vehicle certification program. Specifically, we request that manufacturers be allowed the option to have the one to ten greenhouse gas ratings based on EPA's fuel economy label values that are developed through the vehicle certification program.

- (3) Verbal Comment: (US EPA) Several years ago, the EPA launched our environmental scoring system for light-duty vehicles. It very much mimics what is being proposed today in your amendment. We have been working very closely with ARB.

We will continue to work with ARB because our hope is that down the road, we can come up with one scoring system that will work federally, in all states. But as he (Craig Duehring) articulated so well, there are a couple issues with different data sets that we think we see a future in harmonizing. It's just going to take a little longer.

ARB Response: Currently, ARB and U.S. EPA use different methods to determine global warming emissions. The regulatory changes adopted herein use an equation that accounts for all of the following CO<sub>2</sub> or CO<sub>2</sub>-equivalent vehicle emissions:

- The tailpipe CO<sub>2</sub> emissions.
- The global warming potential of other vehicular greenhouse gas emissions including nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), and hydrofluorocarbon (refrigerant) losses.
- Additional CO<sub>2</sub> emissions from air conditioner (A/C) operation.
- The upstream emissions generated by the production and distribution of the fuel used.

In addition, the U.S. EPA GHG scoring system does not include Medium Duty Passenger Vehicles (MDPV) from 8,500 lb. – 9,999 lb. GVW. These MDPV, such as the Chevrolet Suburban 2500 sport utility vehicle and the Ford E350 passenger van are required under California statute to be including in the new label global warming index. ARB staff will continue to work with the U.S. EPA so that score harmonization can be achieved as soon as practical.

(m) Advantages for Harmonization with US EPA

- (1) Written comment: (AIAM) The AIAM approach (using fuel economy numbers with conversion table) is administratively simple for manufacturers with no additional administrative costs.
- (2) Verbal comment: (AIAM) There are a number of advantages to this option. It's administratively simple for both manufacturers and CARB because it's based on current certification procedures.

- (3) Written comment: (AIAM) For all intents and purposes, consumer information using a 1-10 GHG rating would be the same as the proposed CARB process, since 95% of GHG emissions are based on fuel economy.
- (4) Written comment: (AIAM) The AIAM approach yields more accurate GHG emissions levels because of EPA's recently adopted five-cycle methodology for calculation fuel economy label values which more closely correlates to real world driving patterns than the more limited certification data proposed by CARB.
- (5) Verbal comment: (AIAM) This option also yields the most accurate greenhouse gas emissions information to consumers because EPA has recently adopted a five-cycle methodology for calculating these label values. This five-cycle testing ensures that these labels are much closer correlated to real world driving patterns than the more limited certification data that's used in the 1493 regulation.

The five-cycle testing includes cold temperature operation, air conditioning usage, and higher speed driving. None of these are reflected in the 1493 methodology. The inclusion of air conditioning usage is particularly important since nearly all new vehicles today have air conditioning and it's recognized, of course, that air conditioning usage is an important factor affecting greenhouse gas emissions.

- (6) Written comment: (AIAM) The AIAM approach would ensure harmonization and avoid possible confusion between the EPA labeling and the CARB labeling.
- (7) Verbal comment: (AIAM) Our proposed option would also ensure harmonization now between CARB's labeling and EPA's labeling and websites. And EPA's websites are visited by millions of consumers each year and we believe that it's, you know, it would be a bad idea to have conflicting information for consumers to confuse them rather than help them.
- (8) Written comment: (AIAM) The AIAM method is based on EPA's regulations in effect today, while CARB's proposal is based in part on the AB 1493 regulations which are facing legal challenges that may cause delays in implementation.
- (9) Verbal comment: (AIAM) Finally, our option is based on EPA's current regulation which is in effect today. While CARB's proposal is based, at least in part, in the 1493 regulations which remain under review, this, our option would ensure that the labeling program could move forward on the proposed schedule without any delay.

ARB Response: ARB understands the benefits of harmonizing scales with the U.S. EPA. Every attempt was made to introduce one scoring system that could be potentially used in all 50 states. With these proposed regulations, California will be the only State to require an emissions informational label on the window of all new vehicles. U.S. EPA's labeling program is on-line, web-based, and imposes no requirements on manufacturers to provide vehicle labeling at point of sale. At least one manufacturer has indicated its intent to use the California labeling as adopted here to its entire 50-state vehicle production. Therefore, ARB staff was focused on developing a scoring system that included all CO<sub>2</sub> and CO<sub>2</sub>-equivalent emissions released from vehicle operation. In addition, the U.S. EPA GHG scoring system does not account for MDPVs which are now required under California statute to be including in the new label global warming index.

(n) Alternative Compliance Option

- (1) Written comment: (AIAM) If CARB is unwilling to accept the AIAM proposal (using fuel economy numbers with conversion table) as a direct substitute for the CARB proposal, and then we request that CARB accept the AIAM proposal as a compliance option for the first three years of the program.
- (2) Verbal comment: (AIAM) In conclusion, I just simply point out that we would like for you to adopt our option for the first three years of the program. During that time we would work with staff to evaluate the option so that you can determine whether or not the flexibility should be allowed to continue, and that would also give us a chance to work with ARB and EPA on longer term harmonization.

ARB Response: Because ARB and U.S. EPA do not use identical scoring systems, ARB staff rejected the idea of using an alternative compliance option as this would create a scenario where two identical vehicles could potentially get two different scores. Allowing such a possibility would only create confusion and miss-trust among consumers.

(o) Air Conditioner Refrigerant Leakage

- (1) Written comment: (AIAM) The air conditioner (AC) refrigerant leakage issue is not a problem for new vehicles. AC refrigerant leakage is much more related to the maintenance, or lack thereof, of a vehicle over its useful life than it is to differences in one new vehicle model or another. Not all vehicles will ever experience AC refrigerant leakage; therefore, it is speculative at best, and meaningless at least, to try to account for AC refrigerant leakage in a GHG emissions label for a new vehicle.

ARB Response: The proposed regulatory changes allow a manufacturer to get credit for improved A/C systems that offer reduced or even no leakage of refrigerant. Manufacturers are encouraged to test and submit engineering data and evaluations to ARB for review and approval, if justified.

**2. Summary of Written Comments Submitted During the 15-Day Comment Period following the December 7, 2007 Public Notice of Modified Text, with ARB Responses.**

(a) Harmonization with US EPA

- (1) Written comment: (Ferrari) Ferrari strongly supports harmonization between California and Federal emissions and fuel economy regulations to avoid additional burdens on vehicle manufacturers, especially for small-volume ones.

ARB Response: This comment is outside the scope of the proposed modified text as noticed, and ARB need not respond to it. However, we direct the commenter to our response to 1.(l).

(b) Base Global Warming Score on US EPA Fuel Economy Labeling Rule

- (1) Written comment: (Ferrari) We think it is useful to take into consideration the greenhouse gases (GHG) along with the emission certification level to better identify the environmental impact of each vehicle, using suitable and easy to understand comparative scales. Nonetheless, the GHG emissions of vehicles are mainly due to the CO<sub>2</sub> emissions from exhaust, and therefore directly related to the vehicle fuel economy, a characteristic that is certified and displayed in the fuel economy label, recently modified by U.S. EPA for 2008 and later model years with the main purpose to give consumers more realistic values.

The addition of a global warming index, associated with the CO<sub>2</sub>-equivalent emissions, is appropriate due to the increasing concerns about global warming, and also the greater awareness of most consumers, along with the increasing cost of fuels. But, instead of using a method of rating for GHG based on the CO<sub>2</sub>-equivalent certification values (which means related to the proposed California law AB 1493), we strongly recommend to base the rating on the EPA fuel economy labeling rule, applicable from the 2008 MY, as suggested by AIAM (see comment sent on June 19, 2007). In fact, the 5-cycle method to calculate fuel economy makes it possible to get values which better represent the real world usage. We deem it is preferable to consider such approach to evaluate the environmental performance because it accounts different driving conditions which directly affect fuel consumption and consequently CO<sub>2</sub> emissions. Furthermore, EPA did not get the waiver to CARB to

implement the GHG rule, based on the principle that the global warming problem is really all U.S.A. not only for California.

For the same reason of clearness, we strongly support to use the 1-10 scale for the Global Warming Score in the new Environmental Performance Label. As discussed in previous paragraph, the ratings could be associated to the EPA fuel economy (and CO2 exhaust) values for MY 2008+, though a conversion table.

ARB Response: This comment is outside the scope of the proposed modified text as noticed, and ARB need not respond to it. However, we direct the commenter to our responses to comments 1.(l)(1)-(3).

(c) New Label Format and Color

- (1) Written comment: (Ferrari) The modified format of the Smog Index makes it easier the correct understanding of the relative emissions of a specific vehicle, in comparison with the average value, inside well defined range 1-10. We think such a scale is very common to classify a performance, being 1 the worst and 10 the best. It is easy to catch if a vehicle is better or worse than the average and make comparisons with other vehicles, for the two separate ratings contained in the label. It is also good to add in the new label the suggestion to visit the web site [www.DriveClean.gov](http://www.DriveClean.gov) for people interested in getting more detailed information (another improvement over the old Smog Index Label).

The new format with the green background, different rating scales, and characters is helpful to enhance the conspicuousness of the label, and the reception of the information provided. The green color is the most suitable because internationally associated with environmental protection.

ARB Response: ARB staff agrees with these comments.

(d) Incorporation into Monroney Sticker

- (1) Written comment: (Ferrari) We deem appropriate to allow, at the manufacturer's option, to affix the Environmental Protection Label alone or to insert it in the present "Monroney Label", with smaller minimum dimensions in the second case. This solution is logical, taking into account that the "Monroney Label" contains a lot of information (inclusive of fuel economy) useful for consumers to decide which vehicle to buy.

ARB Response: ARB staff agrees with these comments.

(e) Implementation Date

- (1) Written comment: (Ferrari) Regarding the mandatory date for the new label, Ferrari believes that it is necessary to match with the model year instead of (or in addition to) a specific date like October 1<sup>st</sup>, 2008. MY 2009 is reasonable, provided the final rule will be enacted soon to give vehicle manufacturers the minimum lead-time to plan all the activities necessary to respect new requirements. We agree with CARB to allow anticipated compliance, although it is possible to create some confusion for consumers, because certain vehicles could have the new label, others the old Smog Index label, during the transition period.

ARB Response: This comment is outside the scope of the proposed modified text as noticed, and ARB need not respond to it. However, we direct the commenter to our responses to 1.(i). ARB staff was able to establish an implementation date based on feedback from the automotive industry. The implementation date recognizes the need for lead-time to change out the old label and introduce the new label. Due to varying model year introductions and different manufacturing labeling structures, ARB staff has allowed for early introduction of the new label to potentially coincide with model year introductions.

(f) Tolerances

- (1) Written comment: (AAM) We understand that the regulation specifies a number of dimensions with respect to label size, and location of scales and statements. Sections 6 and 7 allow "...a dimensional tolerance of plus or minus 0.039 inches (1.0 millimeter)..." for each dimension. A 1 millimeter dimension may be exceeded by a very slight paper misalignment. The manufacturers understand the purpose of this requirement is to ensure a uniform label when customers view a vehicle and intend to meet the requirement. The Alliance requests that ARB clarify in the Final Statement of Reasons that enforcement action will not be taken for slight paper misalignment or slight variations in paper stock greater than 1 millimeter, provided the printed black information is properly aligned with itself.

ARB Response: ARB staff agrees that the potential for graphical misalignment on the new label is primarily due to minor alignment differences between the label feedstock and the printer. Therefore, modifications were proposed in the April 3, 2008 second public notice and April 16, 2008 errata to apply a plus or minus 1.0 millimeter tolerance to the printer and label feedstock alignment rather than applying the plus or minus 1.0 millimeter tolerance to each dimension. This modification was made to address potential misalignment between printer and label feedstock rather than the graphics dimensioning which is normally very precise. The plus or minus 1.0 millimeter tolerance gives a total range of 2.0 millimeters.

(g) Additional Information or Other Labels on Same Sheet

- (1) Written comment: (AAM) Some manufacturers will put additional information outside of the 4 x 6 inch CEPL border. The regulation (§2(a)) specifically allows expanding the CEPL to include “bar coding information” outside of the 4 x 6 inch perimeter. As noted in the accompanying explanation, this will allow “label ordering and inventory flexibility among manufacturers.” We understand that, provided all of the other requirements are met and the information is placed outside of the 4 x 6 inch border, the manufacturer could also include the Vehicle Identification Number (VIN) and/or Part Number (the label itself may be assigned a part number).
- (2) Written comment: (AAM) As we read the regulations, they do not require that the CEPL be on a separate sheet. In fact, some manufacturers plan to print the CEPL on the same sheet with other labels such as the Bumper Quality Label and Parts Content Information. This was discussed with ARB staff during the rulemaking process before the board hearing. Although not specified by the regulations for the Environmental Performance Label (even though it is specified for the Alternative Environmental Performance Label), manufacturers do not intend to use green color within a 2-inch perimeter outside of the CEPL label’s border. Again, we do not believe the regulations require the CEPL to be on a separate sheet.

ARB Response: ARB staff agrees with these comments and supports the placement of additional consumer information on a single label feedstock. Therefore, modifications were proposed in the April 3, 2008 second public notice and April 16, 2008 errata to further clarify the use of bar coding, stocking, and other information on the same label feedstock as the Environmental Performance information. The modifications now allow for inclusion of stock numbers and other vehicle related information for consumers on the same label feedstock as the Environmental Performance label. This modification will allow for inventory and label ordering flexibility among manufacturers.

(h) Grid Connected Hybrid Electric Vehicles (GCHEVs)

- (1) Written comment: (AAM) GCHEVs were added to Section 5 of the regulation as part of the proposed 15-Day Notice changes to specify that the global warming score and smog score for GCHEVs should be based on tests when the vehicle is operating on gasoline. The test procedures for GCHEVs have not yet been finalized, and GCHEVs might use blended operation, which would not lend itself to “gasoline-only” type operation. We recommend deleting “Grid Connected Hybrid Electric” from Section 5, and then revising the regulation in the future when test procedures are established for these vehicles.

ARB Response: ARB staff agrees with these comments and modifications were proposed in the April 3, 2008 second public notice and April 16, 2008 errata to remove the grid-connected hybrid electric vehicle from being identified as a vehicle capable of operating on more than one fuel. These vehicles are still under development and not yet available to the consumer as a new production vehicle. Therefore a label is not currently required. Also, special testing procedures are under development to account for the plug-in capability of these unique vehicles and will address the multiple fuel emissions of smog forming and global warming pollutants.

**3. Summary of General Concerns from Written Comments Submitted for the April 3, 2008 Second Public Notice of Modified Text and April 16, 2008 Errata and Subsequent 15-Day Comment Period with ARB Responses.**

(a) Preemption of Labeling Requirements by EPCA

- (1) Written comment: (AAM) As outlined in our letter of June 19, 2007, the Federal Energy Policy and Conservation Act (EPCA) expressly provides that with a Federal fuel economy labeling standard in place, “a State or political subdivision of a State may adopt or enforce a law or regulation on disclosure of fuel economy or fuel operating costs ...only if the law or regulation is identical to that [federal] requirement.” 49 U.S.C. 32919. A Federal fuel economy labeling regulation has been in place since the 1977 model year. As you know, vehicle CO<sub>2</sub> emissions are directly and inversely proportional to fuel economy. Vehicle manufacturers already use CO<sub>2</sub> emission data to calculate vehicle fuel economy in miles per gallon and federal fuel economy label values under federal regulations. Low GHG emissions translate to high fuel economy and vice-versa, making for a redundant label. Moreover, since the California GHG label values are not calculated using the same methodology as the federal fuel economy data, there is a high likelihood that there will be inconsistencies between the state GHG labels and the federal fuel economy labels, causing unnecessary confusion among consumers (i.e. high fuel economy but low GHG score). Therefore, we believe the GHG portion of the new ARB Environmental Performance Label is preempted by federal law.

ARB Response: The comment itself provides contradiction in that the first point made indicates the California global warming label is redundant with the Federal EPA fuel economy label because “CO<sub>2</sub> emissions are directly inversely proportional to fuel economy.” The commenter then makes the point that “the California GHG label values are not calculated using the same methodology as the federal fuel economy data,” and “there is a high likelihood that there will be inconsistencies between the state GHG labels and the federal fuel economy labels, causing unnecessary confusion among consumers.”

Fact is the global warming score on the California label is not based solely on the tailpipe CO<sub>2</sub> emissions rather it includes all global warming emissions from vehicle operation and even accounts for upstream emissions from fuel production (see comments 1.(l)(1)-(3) and response thereto). Therefore, the California label is not redundant with the Federal fuel economy label.

As far as the California label being preempted by federal law, see response to comments 1.(c)(1)-(2).

(b) Failure to Follow Board Direction

- (1) Written comment: (AAM) Board Resolution 07-26 (June 21, 2007) states in part as follows:

“WHEREAS, based on the information in the public record, including the staff report and testimony provided at the hearing, the Board finds that:

...

3. If the regulations adopted pursuant to Health and Safety Code section 43018.5 regarding greenhouse gas emissions do not remain in effect, **the smog index amendments proposed herein can and should be implemented by deleting the greenhouse gas score and label depiction thereof and adjusting the label format accordingly**; and...” (Emphasis added)

Unless and until a CAA 209 waiver is issued for CARB's GHG program, those regulatory provisions are not in effect and not enforceable. Under such circumstances, Board Resolution 07-26 directed staff to delete the greenhouse gas score and label depiction and adjust the format accordingly. By continuing to include the greenhouse gas score as part of the label, the 15-Day notice fails to follow the Board's explicit direction. Since ARB staff is authorized to act only in accordance with the Board's direction, staff should drop the global warming score from the proposed regulations. Failure to do so would violate principles of delegation of authority under California administrative law.

ARB Response: ARB disagrees that the cited Resolution provision prohibits the Executive Officer from adopting final regulations retaining a mandatory greenhouse gas labeling provision.

The Executive Officer is empowered by the Board to act on all matters that the Board has not specifically reserved unto itself. The interpretation of Resolution language is one such delegated matter. In reviewing and approving this Final Statement of Reasons, the Executive Officer has examined the Resolution

language at issue, and has determined that to the extent there is any ambiguity in it, the commenter's view of it is incorrect.

At the time the Board adopted the Resolution, ARB's waiver request to enforce section 43018.5 (as part of regulations implementing AB 1493 (Chap. 200, Stats. 2002) remained pending with U.S. EPA. The Board presented strong legal, policy, and technical arguments in that waiver process, and believed EPA approval was the only defensible decision EPA could make. The Board still believes this is the case, and is therefore challenging EPA's December 19, 2007 denial. *State of California et al. v. U.S. EPA*, U.S. Court of the Appeals for the 9th Circuit, Case No. 08-7011. In addition, soon after the public hearing for this regulatory item the Board requested motor vehicle greenhouse gas emissions information pursuant to AB 32 (Chap. 488, Stats. 2006), independent of AB 1493. See ARB Mail-Out MSO #2007-03. These changed circumstances – a waiver denied and the Board's ability to require submission of greenhouse gas emissions information independent of AB 1493 – make clear that the Resolution language is not subject to the commenter's interpretation.

Rather, what is clear is that the Board did not intend the cited language to override the Board's statutory duty under AB 1229 to adopt a labeling regulation that changes the label's name and discloses greenhouse gas emissions information. As a matter of federal law, ARB understands that it may not enforce AB 1493 regulations until California receives a waiver from U.S. EPA or there is separate federal authorizing legislation. *Central Valley Chrysler-Jeep, Inc. et al., v. Goldstene*, January 16, 2007 Order, Case No. 1:04-cv-06663-AWI-GSA, Document 606, p. 23, 2007 WL 135688. But as a matter of state law, Health and Safety Code section 43018.5 remains in effect, indeed this is presumably why companies belonging to this commenter's trade association are among the plaintiffs challenging the AB 1493 regulations under state law. See *Fresno Dodge et al. v. Goldstene*, Case No. 04 CE CG 03498 (lead case), consolidated with *General Motors Corp. et al. v. Goldstene*, Case No. 05- CE CG 02787 in Fresno Superior Court. Therefore, with these changed circumstances and the AB 1493 regulations still in effect, it is much more likely that until such time as the regulations are clearly not in effect the Board intended to finalize regulations fully meeting the requirements of AB 1229. The Executive Officer has fulfilled the Board's intent with the final, adopted regulations.

(c) Consistency with Federal Programs

- (1) Written comment: (AAM) Comments 3.(a)(1) and 3.(b)(1) above both provide compelling reasons why CARB should drop its mandatory GHG labeling program and instead consider a voluntary program that parallels the existing EPA GHG data (and consequently the anticipated federal GHG labeling program) and better complies with AB 32 (Nunez)

requirements for consistency with Federal programs. The Alliance strongly recommends that CARB adopt this course of action.

ARB Response: It is not clear from the comment with which parts of AB 32 (Chap. 488, Stats. 2006) the commenter believes a mandatory labeling program is inconsistent. The following are potential AB 32 provisions (all Health and Safety Code Sections) ARB identified despite the commenter's lack of specificity, and the reason there would be no conflict: A) Section 38530(c)(2) (reasonable efforts to promote consistency in mandatory reporting and verification of emissions would not apply because there currently are no equivalent federal mandatory reporting and verification requirements); B) Section 38562(b)(4) (ensuring that greenhouse gas emission reduction measures do not interfere with achieving or maintaining federal ambient air quality standards would not apply both because this is not an emission reduction measure and because consumer labeling historically is not treated federally as subject to quantifiable emission reductions); and C) Section 38564 (requiring consultation with the federal government on strategies and methods to reduce greenhouse gases would not apply here because greenhouse gas labeling is not itself an emission reduction measure that ARB is adopting to achieve credit toward AB 32 emission reduction requirements).

(d) Lack of Transition Period if CAA 209 Waiver is Granted

- (1) Written comment: (AAM) The proposed regulations purport to require an immediate change to a different set of testing and calculation protocols in the event a CAA 209 waiver is granted. Section 3.(a)(1) requires that "If California received a waiver of federal preemption under the Clean Air Act...then the global warming emissions value is the CO<sub>2</sub>-equivalent value as calculated in accordance with Title 13, California Code of Regulations, Section 1961.1(a)(1)(B) and certified pursuant thereto." When the 15-Day notice was released, and at present, U.S. EPA has denied the ARB's waiver request, and California is pursuing judicial review of that decision. In the event that this decision is reversed in the future, Section 3.(a)(1) does not provide any lead time or transition period for the testing, reporting, and labeling requirements specified therein. Manufacturers cannot change testing protocols and label values overnight. ARB should not promulgate regulations that could lead to a chaotic situation with inconsistent label values and thereby defeat the purpose of the regulations, which is to provide information enabling consumers to make an informed decision. ARB should delete this provision from the proposed regulations. If the waiver is granted at some point in the future, ARB should revise these regulations accordingly to ensure consistent label values and provide adequate lead-time.

ARB Response: The commenter is correct in assessing that when the waiver is granted allowing California to enforce § 1961.1, Title 13, CCR, the

manufacturers will be required to use the § 1961.1 certification process to establish a global warming score. However, ARB staff is speculative that in such a reversal of the waiver denial, U.S. EPA would build in lead time for implementation and enforcement of § 1961.1, Title 13, CCR. It is reasonable to assume at least a 3 month phase in and at most a 12 month phase in period would accompany such a reversal, which aligns with the six month lead-time already built into these proposed regulations. In addition, § 1961.1, Title 13, CCR has been incorporated in California law since 2005 and most members of the Alliance have already had discussions with ARB staff in preparation for testing and certification to § 1961.1 prior to the waiver denial. Therefore, ARB staff believes that testing protocols by most manufacturers are already established and can be quickly implemented.

Additionally, § 1961.1 testing procedures offer default values for emissions not already being captured during existing testing requirements making the transition from 3.(a)(2) to 3.(a)(1) for establishing a global warming score on the California label relatively seamless.

(e) Information Unavailable for MDPVs

- (1) Written comment: (AAM) The proposed regulations require manufacturers to calculate the GHG score using a combined CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) value using CO<sub>2</sub> values from testing conducted on the city and highway cycles and reported to ARB in accordance with ARB Mailout MSO #2007-03. However, MDPVs are not currently tested on the highway cycle and only city data is reported to ARB in accordance with Mailout #2007-03. Consequently, the combined CO<sub>2</sub> value for city and highway cycles will not be available for MDPVs until 2011 MY when MDPVs are required to incorporate fuel economy labeling. Using only city values would inappropriately shift the GHG score too low for MDPVs and testing MDPVs with the shortened lead time (8 months) for the highway cycle will cause containability issues for MDPVs as majority of the California and Federal certification testing has already been completed. New vehicles may have to be procured and additional testing will have to be scheduled, run, and analyzed to provide the necessary highway CO<sub>2</sub> data. Moreover, Mailout MSO# 2007-03 states that it "does not require any additional Alliance of Automobile Manufacturers emissions tests." Thus, we recommend that the MDPVs should show "N/A" for the GHG score until 2011 MY when testing will commence federally for MDPVs.

ARB Response: MDPV is a subgroup in the 8500-10000 #GVW medium-duty vehicles (MDVs). California MDVs are subject to testing for compliance with the highway NO<sub>x</sub> standard (=2x FTP) and from which testing a highway CO<sub>2</sub> value is readily available and reportable. However, manufacturers can also certify light-duty and medium-duty vehicles under the Cleaner Federal Vehicles rule, the so-called Bin Cert, and when they are certifying under this rule such cleaner

federal vehicles are subject only to federal exhaust standards, which do not include a highway NOx testing/standard. Manufacturers may continue to certify using California MDPV highway values in order to establish a greenhouse gas score for these values. ARB understands that manufacturers may choose to conduct additional testing for MDPVs for which they are not satisfied with the score resulting from the default GHG emissions reported.

(f) Recommendations for a Voluntary Labeling Program

- (1) Written comment: (AAM) The Alliance recommends that ARB institute an interim voluntary labeling program until the time that labeling is required under the Energy Independence and Security Act of 2007 (EISA), 49 U.S.C. §32908(g). This would provide additional consumer information in the interim, while eliminating concerns about preemption under the federal fuel economy labeling law; obviating the need to bring the regulations back to the Board for their approval; and avoiding the likelihood of conflicting information between California labels the coming federal labels. Moreover, it encourages EPA's cooperation to develop a label that meets ARB's needs.

ARB Response: Health and Safety Code §43200.1 directs the ARB to review and revise the existing Smog Index Label and to develop a Global Warming Index to be used in that same label. Reverting to a voluntary global warming index would not meet statutory requirements. Responses addressing Federal preemption concerns are found in comments 3.(a)(1) and 1.(c)(1)-(2) and the responses thereto.

(g) Harmonize with U.S. EPA

- (1) Written comment: (AAM) We recommend that ARB use of one of the following methods to calculate the voluntary GHG score:
- (a) EPA GHG Score: Use the EPA GHG score rather than a different one developed by ARB. This eliminates unnecessary testing and provides the same relative information to the consumer.

ARB Response: Harmonizing with U.S. EPA was not possible. See comments 1(l)(1)-(3) and the responses thereto.

(h) Advantages for Harmonizing with U.S. EPA

- (1) Written comment: (AAM) These options have the following advantages:
- (a) They would allow the use of a known value that is consistent across the entire industry to provide more consistency for the consumer.

ARB Response: See response to 1.(m).

(i) Score Adjustments within Test Group

(1) Written comment: (AAM) We recommend that ARB use of one of the following methods to calculate the voluntary GHG score:

(b) Calculate CO<sub>2</sub>e for the Test Group: The method proposed by the subject notice, for manufacturers with complex line-ups, will overstate CO<sub>2</sub> emissions on every model by about 8% on average when compared to high sales configurations and some models may be overstated by as much as 18%. Correspondingly, nearly half of the models could be assigned scores 1 to 2 numbers worse than appropriate if each model was averaged with high sales configuration CO<sub>2</sub> data for every model. Thus, if unique labels are required, we believe ARB should allow manufacturers the option to calculate the Global Warming Score for each test group through ARB-approved common adjustments to city and highway CO<sub>2</sub> test data. The data used to adjust the emission test group score would be based on existing Federal and California CO<sub>2</sub> emissions data that is currently available prior to production. This prevents the need for any additional testing for a more representative Global Warming Score. To achieve this, a manufacturer could average the emission test group CO<sub>2</sub> data with existing, high sales configuration CO<sub>2</sub> data (California or Federal). Alternatively, a manufacturer could also be allowed to optionally label individual models or powertrains, such as unique transmission types, within the emission test group when more CO<sub>2</sub> data for high sales configurations may be available prior to production start.

(2) Written comment: (AAM) These options have the following advantages:

- (b) They would ensure a representative GHG score. ARB's proposal may cover a number of different models with the same GHG score even though it may be unrepresentative of the vehicle. For example, a 2WD and 4WD could have the same value reported under the MSO #2007-03 CO<sub>2</sub>e methods even though they have very different actual CO<sub>2</sub>/GHG emissions.
- (c) They would avoid problems of the same vehicle having different GHG scores based on when the vehicle was certified. If the certification application is updated for a running change, the CO<sub>2</sub>e may be updated to reflect these changes. A voluntary label would eliminate the forced changes that could result in different GHG scores.
- (d) They would prevent disparities between companies that predominantly certify vehicles to 50-state standards and those that do not:
  - (i) 50-State certified vehicles are allowed to use all valid data points unlike the values reported under MSO #2007-03.

- (ii) For CA-certified vehicles, additional testing within the CA test group would be necessary to provide representative GHG scores that are competitive with the data available under 50-State testing. However, this testing duplicates test results available from valid, existing Federal configuration test data, which does not seem reasonable.
1. Number of prototype vehicles and test facilities available are limited for any additional testing to acquire a more representative and competitive label value.
  2. Additional cost for extra California prototype vehicles for such testing is not considered in the notice nor is it practicable.
  3. Lead time requirements for additional test vehicles are prohibitive
- (3) Written comment: (Honda) Honda is concerned that the most recent modifications to the label value and vehicle rating may, in some cases, not provide the most accurate information to a prospective customer of a new vehicle. This concern is based on the compliance parameter outlined in ARB Mail-out MSO #2007-03 which is the guideline for label value determination and satisfied with CO2 data from the certification Emission Data Vehicle (EDV) This means that only one vehicle per emissions test group is represented, potentially a rating that is unrealistically greater or less for some vehicles in that specific test group.

In the certification process and establishment of EDVs and emission test groups, it is common for manufacturers to group multiple models together under one test group. The CO2 values could potentially be quite different between these individual models. Also, EDV data alone may not show the relative advantage of a different transmission type. For example, if the EDV is an automatic transmission version, the potential benefits of other transmission variants may be hidden from the consumer.

ARB Response: ARB staff agrees that there is a potential for the global warming score to be slightly different among all vehicles identified within an engine family test group, if the manufacturer decides to certify multiple vehicles using one engine family. In this event, multiple vehicle configurations and even multiple models are certified to one standard by testing and certifying the worst case vehicle which then gets applied to all vehicles in the test group. This certification process is not a requirement but rather a convenience offered to the manufactures based on testing requirements outlined in § 1961, Title 13, CCR. ARB staff recommends that if the manufacturer believes an improved global warming score may be achievable by one or more vehicle configurations or models within an engine family test group, that those vehicle configurations or models be tested separately and the test data submitted to ARB as a separate test group. This will allow the vehicle configurations and models with fewer global warming emissions to achieve a better global warming score if warranted.

(h) Indirect Air Conditioning Credit Methodology

- (1) Written comment: (AAM) If ARB moves forward with using the CO<sub>2</sub>e calculation specified in the 15-Day Notice, there are some additional concerns regarding the A/C–indirect qualifications. Currently, there are no specific methods or procedures to demonstrate achieving lower emissions with "improved" A/C systems as there are with the "low-leak" system (SAE J2727). We understand that credit will be based on the manufacturer's engineering evaluation. However, in addition to an engineering evaluation to demonstrate lower A/C emissions, the Alliance recommends the development of a test procedure through SAE to define an "improved" system. Once adopted, the SAE procedure would be an allowable option to an engineering evaluation. Industry is willing to work with ARB and SAE to develop a procedure and calculation to demonstrate "improved" A/C systems based on realistic applications of various types of compressors.

ARB Response: ARB staff agrees that the lack of an agreed-upon method or procedure for quantifying an improved A/C system with respect to indirect emissions is a detriment in getting a robust assessment of improvements, especially when compared to how SAE J2727 lends itself nicely to a robust assessment of direct emissions. However, there are some system improvements that are well established and staff is interested in promoting those improvements in new A/C systems. ARB is interested in working with industry on the development of test procedures. The current work going into the development of the GREEN-MAC-LCCP tool will eventually migrate into the SAE J2766 standard and should be a useful start. ARB staff welcome this opportunity, but does not believe that the implementation of A/C system improvements via the proposed regulation should be delayed.

(i) Direct Air Conditioning Credit Methodology

- (1) Written comment: (AAM) While the Direct air conditioning credit procedure allows manufacturers to use a standard procedure to determine the credit, it appears to allow that credit only if manufacturers meet four criteria, namely (see Attachment 1 to the 2nd 15-Day Notice paragraph 3.(a)(2)(B)ii.1. on page A-4): 1) minimizing the number of fitting and joints; 2) limiting the use of single O-rings for pipe and hose connections; 3) using lowest permeability hose for containment of the refrigerant; and 4) minimizing leakage from the compressor shaft seal and housing seals. As a first point, no definition of any of the individual criteria is provided. For example, what is the "lowest permeability hose" and how would a manufacturer demonstrate it has "limited use of single O-Rings" or minimized "leakage from compressor shaft seal and housing seals?" However, the proposed regulation appears to require that manufacturers meet all four of these vague criteria, any one or even all of which could vary by manufacturer. Be that as it may, there is no reason for any of

these criteria because an SAE test procedure is available and required to demonstrate whether the direct emissions have or have not been reduced. Manufacturers should be allowed to use any, all, or none (and use an entirely different method) of the criteria specified to reduce direct air conditioning emissions, provided it can demonstrate the emission reductions using the SAE test procedure.

ARB Response: The four criteria exist because ARB staff is interested in learning, via an engineering evaluation, how the A/C system has been improved. The sole use of SAE J2727 as a simple accounting of system components does not tell us the path to the improvements. While it is correct to say that the final J27272 score itself speaks of the overall system improvement and how emissions were lower, there is still a need to understand the evolution of the system and the nature of the improvements. So long that it can be demonstrated that reductions were made, ARB staff agrees that the principal notion of the comment. But the four criteria must be retained as a key element of the overall engineering evaluation and information package that should come with the application.

(j) Delete criteria for direct AC Credit

- (1) Written comment: (AAM) For Direct air conditioning allowances, the Alliance recommends deleting the four criteria and simply the required demonstration using the SAE test procedure to demonstrate that the vehicle's A/C emissions are less than 25 grams per year.

ARB Response: See response to 3.(i). The 4 criteria do allow for important information that ARB needs to make the overall assessment of the system improvements. SAE J2727 is one element, albeit a very important element, of a set of key parameters.

(k) Default Values for Zero Emission Vehicles

- (1) Written comment: (Honda) We strongly encourage CARB to reconsider application of a default value for Battery Electric Vehicles, Fuel Cell Vehicles, and Hydrogen Internal Combustion Engine Vehicles. We recognize the time required to thoroughly evaluate technology progress and update values for labeling of these vehicles and the need to do this properly. Nevertheless, a default value does not appropriately represent recent advances in vehicle efficiency. The 2004 data CARB used to calculate the Hydrogen FCEV default value has not been updated to reflect the rapid advance in fuel cell technology. Specifically, the default CO<sub>2</sub> equivalent combined value of 210 g/mile for the Hydrogen Fuel Cell Electric Vehicle does not reflect some of the second and third generation FCEV technology being introduced, which can demonstrate significantly higher Tank-To-Wheel fuel economy compared to earlier models.

ARB Response: The default values used for the battery electric, fuel cell, and hydrogen internal combustion engine vehicles are based on the ARB August 6, 2004 Staff Report: *Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider Adoption of Regulations to Control Greenhouse Gas Emissions from Motor Vehicles*, ARB August 6, 2004 Technical Support Documents For Staff Proposal Regarding Reduction of Greenhouse Gas Emissions From Motor Vehicles, and subsequent addendum. The values account for emissions from fuel production, distribution and vehicle operation (Well-to-Wheel).

ARB recognizes that small improvements to fuel production and vehicle efficiencies may have been achieved since the 2004 report; however these minor efficiencies did not warrant a new costly study to justify new default values for vehicles that are not even ready for retail sales. ARB anticipates these advanced technology vehicles to be commercially available beginning in the 2010 model year at best. ARB staff will continue to monitor zero emission vehicle progress and fuel production advancements and recommend appropriate adjustments to the default values when fiscally prudent.

(l) Correction to Grammar

- (1) Written comment: (Nathan Champlin) Section 3(a)(2)(A) should be corrected to use "then" rather than "than."

ARB Response: Correction noted and made.

(m) Support

In addition to the above comments, this rule making received several letters of support from the environmental community and public citizens. These support letters are available in the legal file.