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

> September 22, 2009 Ref. No. MNAO-09/001

## Subject: Notice of Public Hearing to Consider Proposed Amendments to New Passenger Motor Vehicle Greenhouse Gas Emission Standards, September 24-25, 2009

Mazda Motor Company (Mazda) supports the California Air Resources Board (CARB) proposed amendments to the New Passenger Motor Vehicle Greenhouse Gas Emissions Standards which allows the aggregation of volumes from California and states adopting California standards into one fleet average as well as to allow the use of the Federal CAFE data to demonstrate compliance with the greenhouse gas (GHG) standards.

Mazda would like to comment on the following:

- Clarification of calculation procedure using CAFE Program emission data
- A/C Emission Allowance based on MAC 2009-01
- Confirmation of District Columbia Regulation

## 1) Clarification of calculation procedure using Federal CAFE data

Mazda supports the proposed amendment that allows the use of Federal CAFE data to demonstrate compliance with the California GHG standards (reference: section 1961.1. (a)(1)(B)). However, we believe that the calculation using CAFE data should be based on the Model Type Group instead of the GHG vehicle test group because CAFE is calculated based on Model Type Group (referred to 40 CFR Part 600 Subpart F) while the California fleet GHG is calculated with CO2 for each GHG vehicle test group.

We also believe it is appropriate that a manufacturer submit sales volume for the Model Type if a manufacturer elect to use the CAFE Program emission data (reference: California Exhaust Emission Test Procedure H. 4.5 (a)(v)).

We also request that CARB allow an option to calculate the grams per mile CO2 from CAFE data using the carbon content of gasoline or diesel, which is :

CO2 equivalent grams per mile = 8887/ miles per gallon for gasoline (indolene)

CO2 equivalent grams per mile = 10179/miles per gallon for diesel<sup>1</sup>

1

Conversion rate are referred from CALIFORNIA AIR RESOURCES BOARD AN ENHANCED TECHNICAL ASSESSMENT dated February 25, 2008 :COMPARISON OF GREENHOUSE GAS REDUCTIONS FOR THE UNITED STATES AND CANADA UNDER U.S. CAFE STANDARDS AND CALIFORNIA AIR RESOURCES BOARD GREENHOUSE GAS REGULATIONS



## 2) A/C Emission Allowance based on MAC 2009-01

Mazda supports the provision of A/C direct emission allowance and A/C indirect emission allowance. We would like to request that the A/C direct emission reduction credits and/or A/C indirect emission reduction credits which are approved based on MAC 2009-01 be accepted for the GHG standard A/C direct emission allowance and A/C indirect emission allowance.

The SAE J2727 approach is accepted for A/C direct emission credit in MAC 2009-01. We believe the SAE J2727 approach is appropriate to quantify the real-world leakage in vehicle A/C systems. The U.S. Environmental Protection Agency also proposed an A/C leakage credit based on SAE J2727 for its GHG program.

We believe that the A/C credits that are approved based on MAC 2009-01 are appropriate for the California GHG Standards.

## 3) Confirmation of District Columbia Regulation

Section 1961.1 (a).(1).(A).1. includes the options for fleet average compliance. The option 2 says "...produced and delivered for sale in California, the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507)." We do not find the regulation of District Columbia that adopted California emission and we do not believe that the regulation is effective, and therefore we believe that the District Columbia should be eliminated.

Sincerely your

Naoyuki Osaki General Manager Environmental & Safety Engineering Department

cc: Mazda North American Operation