

Date: December 12, 2017 Mail-Out #MSC 17-20

To: All Interested Parties

Subject: PUBLIC WORKSHOP TO DISCUSS PROPOSED AMENDMENTS TO THE

CALIFORNIA EMISSION CONTROL SYSTEM WARRANTY REGULATIONS AND MAINTENANCE PROVISIONS FOR ON-ROAD HEAVY-DUTY VEHICLES WITH GROSS VEHICLE WEIGHT RATINGS GREATER THAN 14,000 LBS.

The California Air Resources Board (CARB or Board) invites you to participate in a public workshop to discuss staff's proposed regulatory amendments to Title 13, California Code of Regulations, Section 2036 (13 CCR 2036), regarding Heavy-Duty Vehicle (HDV) emission warranty requirements, and staff's proposed modifications to the maintenance provisions in Section 86.004-25 of the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel/Otto-Cycle Engines and Vehicles" (California Test Procedures). Specifically, the workshop will focus on the need for longer HDV emission warranty periods in California to help achieve attainment with National Air Quality Standards.

The workshop will be held at the following location and time:

Date: Friday, January 12, 2018 Time: 9:00 a.m. to 12:00 p.m. (PST)

Location: South Coast Air Quality Management District, Auditorium

21865 Copley Drive

Diamond Bar, California 91765

The workshop will be available via webcast for those unable to attend in person. The broadcast can be accessed on the day of the workshop at http://www.aqmd.gov/home/calendar_v2/webcasts. Information on submitting questions and comments will be provided during the webcast for remote participants. Staff's presentation and any associated documents will be posted prior to the workshop on CARB's website at: https://www.arb.ca.gov/msprog/hdlownox/hdlownox.htm.

Background

On November 3, 2016, CARB staff held a workshop in Diamond Bar, California, to introduce its upcoming control measures for reducing NOx emissions. At that workshop, CARB presented an overview of its warranty lengthening proposal, and announced the formation of a stakeholder warranty workgroup. At the first warranty workgroup meeting, CARB staff requested data from stakeholders, including warranties currently offered, fail rates for

All Interested Parties December 12, 2017 Page 2

emissions-related components, and anticipated costs of lengthening the emissions warranty periods to various levels.

On July 12, 2017, CARB staff held a second public workshop in Diamond Bar, California. This workshop focused solely on the proposed regulatory amendments to the California Emission Warranty Regulations for On-Road Heavy-Duty Vehicles. CARB presented on the need for, and feasibility of, longer warranties for heavy-duty vehicles. CARB staff proposed a "two-step" process with the first step being lengthened warranty periods under this rulemaking, and the second step being potential changes to useful life periods along with other Low-NOx control measures at a future rulemaking currently scheduled for late 2019.

After the July 12, 2017, workshop, CARB staff explored further the entwined relationship between warranty periods, the certification process, heavy-duty vehicle on-board diagnostics (HD OBD), and the provisions by which engine manufacturers are allowed to schedule periodic maintenance for emission-related components. Of particular concern is the manner in which a component's warranty period could be adversely affected by scheduled maintenance such that a manufacturer's expected warranty period obligation would actually be shortened despite a lengthened warranty period. To ensure that CARB's proposal was comprehensive with respect to these other regulatory provisions, and to afford more time to consider additional data provided by stakeholders with respect to existing warranty coverage and costs, CARB staff decided to delay proposing the warranty period amendments to the Board from December 2017, until spring 2018.

Proposal

CARB staff proposes to amend the California on-road heavy-duty vehicle warranty regulations by lengthening existing warranty periods to better reflect the longevity and usage of modern vehicles, thus better ensuring that any defects that cause engines or vehicles to fail to conform to applicable requirements are repaired at no additional cost to the vehicle owner. Vehicle owners who do not have to pay "out-of-pocket" for repairs are more likely to repair emission-related malfunctions in a timely manner, especially when those malfunctions do not also affect vehicle performance or fuel economy.

Furthermore, Class 8 HDVs frequently remain in service up to 1,200,000 miles, and the current warranty period of 100,000 miles is insufficient to ensure that emission performance will remain effective for a meaningful portion of the vehicle's service life.

Table 1 shows California's current emissions warranty requirements for HDVs as well as proposed longer warranty periods for Class 4-8 HDVs. In Table 1, emissions warranties are lengthened to better coincide with the useful life of the engine typically used to power the specific class, or range of classes, for each vehicle. In addition to the longer minimum warranty periods shown below, CARB staff proposes that the 3,000 hour limit no longer be applicable under California's amended warranty period provisions for HDVs.

Table 1
Proposed Amended Warranty Periods

VEHICLE / ENGINE CATEGORY	CALIFORNIA CURRENT WARRANTY (miles)	CALIFORNIA PROPOSED WARRANTY (miles)
	DIESEL	DIESEL
Class 8 Heavy-Heavy	100,000	350,000
GVWR > 33,000 lbs.	5 years/3,000 hours	5 years
Class 6-7 Medium-Heavy	100,000	150,000
19,500 lbs. < GVWR ≤ 33,000 lbs.	5 years/3,000 hours	5 years
Class 4-5 Light-Heavy	100,000	110,000
14,000 lbs. < GVWR ≤ 19,500 lbs.	5 years/3,000 hours	5 years

Additionally, to ensure that existing maintenance provisions do not inadvertently shorten the proposed lengthened warranty periods, or otherwise transfer the liability for component replacement from manufacturer to vehicle owner for emissions-related components during the lengthened warranty periods, CARB staff proposes two complementary amendments. First, under staff's proposal, the language in 13 CCR 2036 (d) that limits the warranty period to the first scheduled maintenance interval for a specific part would be amended to align with existing federal provisions that do not allow scheduled maintenance to truncate warranty. Second, the minimum scheduled maintenance intervals specified in § 86.004-25 of the "California Test Procedures" would be revised to reflect current technological feasibility. For example, the minimum allowable replacement interval for components for which no manufacturer is currently scheduling required replacement maintenance would be set to the current applicable useful life. In addition, the minimum allowable replacement interval for components for which one or more manufacturers currently require scheduled replacement maintenance would be set to the shortest replacement interval designated by any manufacturer.

CARB staff is also considering proposing to amend the warranty regulations to include special consideration for high-cost and catastrophic emission failure-inducing components, similar to the provisions currently required for catalyst beds and diesel particulate filter elements under 86.004-25 (i) of the "California Test Procedures." Potentially, high-cost, catastrophic emission failure-inducing components could be prohibited from being replaced during the applicable useful life period unless the manufacturer requests an allowance to do so and pays for the replacement.

Additionally, CARB staff is considering proposing to amend the "General Emissions Warranty Coverage" applicability provisions in 13 CCR 2036 (b)(2) to include any emission-related component that causes the HD OBD malfunction indicator light (MIL) to illuminate. This is currently the practice for both light- and heavy-duty vehicles; therefore, CARB intends to clarify

All Interested Parties December 12, 2017 Page 4

the language for heavy-duty vehicles to be similar to that for light-duty vehicle applications.

Other minor changes to warranty information reporting and clarifying changes may also be proposed as part of this warranty period rulemaking.

At the workshop, staff also plans to share draft cost and emission benefit estimates for the warranty amendments being considered, and to field questions regarding the CARB-sponsored survey of HDVs and repair facilities in California that was recently conducted by the Sacramento Institute for Social Research for studying heavy-duty vehicle warranty cost and coverage structures.

CARB staff welcomes discussion on its proposals, and is soliciting comments and questions from interested stakeholders.

Contact

If you have questions about the proposed workshop agenda or the topics to be discussed, please submit them to Mr. Jeff Lowry, Staff Air Pollution Specialist, at (626) 575-6841 or by email at jeffrey.lowry@arb.ca.gov, or to Mr. Ronald Haste, Manager of the Off-Road Control Section, at (626) 575-6676 or by email at ron.haste@arb.ca.gov.

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Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and verbal comments, submitted attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia.
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- Una acomodación razonable relacionados con una incapacidad.

All Interested Parties December 12, 2017 Page 5

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Sincerely,

/s/

Michael Carter Assistant Chief Mobile Source Control Division

cc: Kim Heroy-Rogalski, Chief

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