



Air Resources Board



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Arnold Schwarzenegger
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TO: All Interested Parties Mail-Out #MSC 09-34

DATE: October 8, 2009

SUBJECT: GASOLINE ENGINES USED IN CONJUNCTION WITH HYBRID
SYSTEMS CERTIFIED TO THE URBAN BUS SERVICE CLASS

Similar to the [March 23, 2009, Mail-Out #MSC 09-14](#) regarding urban bus medium-heavy-duty diesel engines with hybrid systems; this letter is to advise transit agencies of the maintenance and reporting requirements associated with gasoline engines used in conjunction with hybrid systems certified for use in the urban bus service class.

Transit agencies operating buses with gasoline engines used in conjunction with hybrid systems certified to the urban bus service class, must meet specific conditions to maintain the engine's certification. Any engine certified to operate in the primary intended service class of urban bus must have an emission compliance useful-life of 435,000 miles. As gasoline engines are certified for emission compliance for only 110,000 miles, the gasoline engine used in an urban bus must be replaced at, or about, an odometer reading of 110,000, 220,000 and 330,000 miles. Each replacement engine may be: 1) a newly California certified urban bus engine of the model year in which the service interval occurs, 2) a new replacement engine in all material respects the same as the engine listed in the engine's executive order, or 3) a newly remanufactured engine conforming to all specifications of the engine listed in the engine's executive order or conforming to all specifications of newer model-year engines certified to the urban bus primary intended service class. In addition, an urban bus with a gasoline engine beyond its certified useful life does not comply with the urban bus certification requirements in title 13, California Code of Regulations, section 1956.8, and is subject to enforcement action and penalties.

Transit agencies must report the engine's yearly total odometer reading as of January 1 each year, the projected engine replacement schedule upon purchase of the urban bus, and documentation that the gas engine is replaced at a mileage at, or about, every 110,000 miles. In addition, it is recommended that transit agencies outline the conditions of engine's replacement schedule in the contract language of the bus purchase order.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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If a transit agency fails to replace the engine at the required interval, the engine is no longer certified and will also be deemed noncompliant for the purposes of meeting the transit fleet requirements. Noncompliant engines could negatively affect meeting emissions reduction requirements, causing the transit agency to be out of compliance with the Fleet Rule for Transit Agencies.

For determining compliance with the oxides of nitrogen (NO_x) emission requirements, the standards used for calculating a fleet's NO_x average will be 10.0 grams per brake horsepower-hour.

Questions regarding this advisory should be directed to Mr. Eric Bissinger, Air Pollution Specialist, at (916) 324-9424, or by email at ebissing@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Mr. Eric Bissinger
Air Pollution Specialist
In-Use Control Measures Section