State of California
Air Resources Board

UPDATED INFORMATIVE DIGEST

AMENDMENTS TO REGULATIONS REGARDING NEW AFTERMARKET AND USED CATALYTIC CONVERTERS OFFERED FOR SALE AND USE IN CALIFORNIA

Sections Affected: Amendments to section 2222, title 13, California Code of Regulations, Add-on Parts and Modified Parts, and adoption of the incorporated document, "California Evaluation Procedures for New Aftermarket Catalytic Converters."

Background: California Vehicle Code sections 27156 and 38391 generally prohibit the sale, offer for sale, advertisement, or installation of any device that alters the design or performance of any required motor vehicle pollution control device or system. ARB is authorized to exempt non-original equipment components from this prohibition if it determines that such components will not reduce the effectiveness of any required pollution control device or would not cause vehicle emissions to exceed applicable standards.

Within this context, ARB has promulgated regulations that allow the sale of new aftermarket catalytic converters and used original equipment converters if they comply with established performance and other criteria. The availability of these aftermarket converters creates a less expensive option for vehicle owners needing a new catalytic converter compared to the cost of purchasing an original equipment manufacturer (OEM) catalytic converter. The performance requirements for these aftermarket converters balance the continued need to control in-use emissions from motor vehicles as they age with the cost of replacing catalytic converters on vehicles that often have a limited remaining lifetime and relatively low market value.

The ARB's previous aftermarket converter requirements, adopted in 1988, specify fixed minimum conversion efficiencies that aftermarket converters must meet through 25,000 miles of use. However, with the significant advances in the emission-control performance and durability of motor vehicles that have occurred since 1988, improvements to the performance requirements for non-original equipment aftermarket catalytic converters are needed to keep pace.

Description of Regulatory Action: On October 25, 2007, the Board conducted a hearing to consider staff's proposal to establish new performance standards for new aftermarket converters that are based on reducing engine-out emissions to levels allowing in-use vehicles equipped with aftermarket catalysts to comply with certification emission standards for a period of 5 years or 50,000 miles. The amendments apply to all new aftermarket catalytic converters sold, advertised, or

installed on or after January 1, 2009. The amendments also require manufacturers to demonstrate that new aftermarket converters are compatible with catalytic converter malfunction detection monitoring that is part of the on-board diagnostic system (OBD II system) on 1996 and newer model year vehicles. Manufacturers must demonstrate that new aftermarket catalytic converters will not cause the test vehicle's Malfunction Indicator Light (MIL) to illuminate when the catalyst is functioning properly, and that the test vehicle's OBD II system can detect an aged converter by the time its conversion efficiency decreases to a level causing the vehicle emissions to exceed the manufacturers' limits for malfunction detection by no more than a factor of 50 percent.

The amendments also extend the current warranty period for new aftermarket converters from 25,000 miles to 5 years or 50,000 miles, establish warranty data reporting requirements, require more informative labeling on the shell of the catalytic converter, and establish requirements for quality control checks on the converter manufacturing process.

With regards to used original equipment catalytic converters, the Board adopted amendments that would eliminate, effective July 1, 2008, or 30 days after the amendments are filed with the Secretary of State's office, whichever date is later, the current provisions allowing the advertising, sale, and installation of used OEM catalytic converters. The Board found that available methods used to screen the condition of used catalytic converters before resale are not sophisticated enough to ensure levels of performance necessary for current technology motor vehicles to meet emission standards. Adequately improved screening methods would not be economically practical (i.e., screening costs would exceed the value of the used converter itself). Without an economically feasible way to ensure that used converters function at levels appropriate for the vehicle models they would be installed on, benefits to air quality may not be realized.

At the conclusion of the hearing, the Board adopted Resolution 07-48, in which it approved the originally proposed amendments without modification.

Comparable Federal Regulations

Aftermarket catalytic converters are legal for sale federally under an enforcement policy established by the United States Environmental Protection Agency (U.S. EPA) in 1986. Under this policy, aftermarket catalytic converters must achieve at least 70 percent conversion efficiency for hydrocarbon (HC) and carbon monoxide (CO) emissions, and 30 percent for oxides of nitrogen (NOx) emissions. With the exception of the lower NOx efficiency, the federal requirements are very similar to California's existing requirements. Therefore, as described above, the proposed amendments would significantly strengthen California's requirements for new aftermarket catalytic converters compared to U.S. EPA's guidelines in terms of required conversion efficiencies and converter durability.

Current U.S. EPA policy permits the sale of used original equipment catalytic converters if they are screened to ensure they perform at levels generally comparable to those required for new aftermarket converters. The adopted amendments would sunset California's similar provisions because screening methods to ensure that used original equipment converters can perform at levels comparable to staff's proposed requirements for new aftermarket converters are not economically feasible.