

Regulatory Announcement

Final Rule for Emissions Durability Test Procedures

The U.S. Environmental Protection Agency (EPA) is completing a regulation that instructs automotive manufacturers how to conduct the durability procedures used to predict the useful life emissions of new vehicles. This rulemaking is in response to an October 22, 2002, United States Court of Appeals for the District of Columbia Circuit decision that ordered EPA to issue new emissions durability regulations.

Summary of the Final Rule

This final rule includes durability procedures applicable to light-duty vehicles and trucks, and some heavy-duty vehicles. Manufacturers will use these procedures to predict what the emission levels of new vehicles will be at the end of their useful life period (e.g., 120,000 miles for Tier 2 light-duty vehicles). The rule also includes two prescribed test methods: (1) the standard whole vehicle aging cycle, and (2) the standard bench aging cycle. Manufacturers would use one of these cycles to age pre-production vehicles to the equivalent of the useful life mileage. Test data from this aging would then be used to project what the emission levels of certification vehicles would be at their full useful lives. In addition, EPA includes a provision to allow the use of customized or alternative cycles with advance EPA approval.

This final rule affects the durability procedures of the new vehicle certification program. Other features of the certification program, such as the reporting requirements and in-use verification testing are unaffected.

Key Elements of the Final Rule

- Standard Road Cycle - a driving cycle used to operate a vehicle on a track or dynamometer for the mileage equivalent to the useful life period prescribed elsewhere by regulation.
- Standard Bench Cycle - a laboratory cycle used to rapidly age emission components - primarily the catalytic converter and oxygen sensors - to the equivalent of the useful life period. This is done by exposing the components to extremely high temperatures.
- Provisions for using customized or alternate procedures to those above. Advance EPA approval is required; the criteria are spelled out in the regulations.
- Provisions for using the In-Use Verification Program (IUVP) test data to evaluate the effectiveness of the durability program. IUVP data is collected as part of the current certification regulations (known as "CAP 2000").

Background

EPA's regulations detail the process motor vehicle manufacturers must follow to obtain EPA emissions certification, as required in the Clean Air Act. In 2000, EPA issued a comprehensive update to the certification regulations for light-duty vehicles and light-duty trucks. These certification regulations are known as "CAP 2000" (Compliance Assurance Program). They include detailed procedures on the selection of vehicles for testing, specifications on the information that must be submitted to EPA, and other requirements pertaining to reporting and testing.

Under CAP 2000, each manufacturer, except small volume manufacturers, was required to develop an emission durability process which would effectively predict the in-use deterioration of the vehicles they produce. EPA advance approval was needed.

Afton Chemical Corporation (formerly known as Ethyl Corporation) petitioned for review of the CAP 2000 rulemaking, claiming that CAP 2000 durability provisions were unlawful because EPA had not established methods and procedures for making tests by regulation as required by Clean Air Act Section 206. In an opinion issued on October 22, 2002, the Court found that CAP 2000 regulations were not consistent with Section 206(d) of the Clean Air Act as they did not "establish methods and

procedures for making tests” and remanded EPA to vacate those regulations and issue new ones. Therefore, in this final rule, EPA is addressing the mandate of the Court to establish such procedures.

For More Information

You can access this rule and related documents on EPA’s Office of Transportation and Air Quality (OTAQ) Web site at:

www.epa.gov/otaq/ld-hwy.htm#cap2k

For further information on this final rulemaking, please contact Linc Wehrly at:

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