

Regulation History of the E15 Partial Waivers Under the Clean Air Act

In order to protect the emission control systems of vehicles and engines, the Clean Air Act prohibits the introduction into commerce of fuels or fuel additives that are not substantially similar to the fuels or fuel additives used in certifying vehicles and engines to emission standards. However, the Clean Air Act authorizes EPA to grant a waiver of this prohibition if it can be demonstrated that the vehicles and engines using the otherwise prohibited fuel or fuel additive will continue to meet their emission standards over their “full useful life” (e.g., 100,000 or 120,000 miles for light-duty motor vehicles, depending on the vehicle type and model year).

In March 2009, Growth Energy (a coalition of U.S. ethanol supporters) and 54 ethanol manufacturers applied for a waiver to increase the allowable amount of ethanol in gasoline from E10 to E15. The waiver application included data on the impact of E15 on vehicle emissions, fuel system materials, and drivability. Additional data were developed by DOE, which in 2008 began testing for potential impacts of various ethanol-gasoline blends on the emission control systems of MY2007 and newer light-duty motor vehicles. This testing followed enactment of the Energy Independence and Security Act of 2007 (EISA), which calls for significantly increasing the amount of biofuels, such as ethanol, to be used in transportation fuel.

On October 13, 2010, based in large part on DOE test data, EPA partially granted Growth Energy’s waiver request. This partial waiver allows fuel and fuel additive manufacturers to introduce E15 into commerce for use in MY2007 and newer light-duty motor vehicles, subject to certain conditions. EPA denied the waiver for E15 use in MY2000 and older light-duty motor vehicles, and all heavy-duty gasoline engines and vehicles (e.g., delivery trucks), highway and off-highway motorcycles, and non-road engines, vehicles, and equipment (e.g., boats, snowmobiles, and lawnmowers) due to insufficient test data or other information to support a waiver for these vehicles and engines.

On January 21, 2011, after additional DOE test data were made available to the public, EPA took further action on Growth Energy's waiver request application by partially approving the waiver to allow the introduction into commerce of E15 for use in MY2001-2006 light-duty motor vehicles, subject to the same conditions that apply to the partial waiver decision for MY2007 and newer light-duty motor vehicles. Taken together, the two waiver decisions allow the introduction into commerce of E15 for use in MY2001 and newer light-duty motor vehicles if the waiver conditions are met.

On February 27, 2012, EPA issued a memorandum concerning a minor technical error related to one of the DOE test vehicles from MY2001-2006. The error stemmed from a manufacturer's mislabeling of the test vehicle model and had no material impact on the January 2011 waiver decision.

EPA placed two types of conditions on the waivers for E15: (1) those to help prevent misfueling of E15 into vehicles, engines and equipment that may not use E15; and (2) those addressing fuel and ethanol quality. All conditions must be met before E15 may be introduced into commerce.

Fuel quality conditions:

- Ethanol used for E15 must meet ASTM International D4806-10.
- The Reid Vapor Pressure for E15 is limited to 9.0 psi during the summertime.

Misfueling mitigation conditions:

- Fuel and fuel additive manufacturers subject to the waivers must submit to EPA a plan (a misfueling mitigation plan (MMP)), for EPA's approval, and must fully implement the EPA-approved MMP prior to introduction of the fuel or fuel additive into commerce as appropriate. The MMP must include provisions that will implement all reasonable precautions for ensuring that the fuel or fuel additive is only introduced into commerce for use in MY2007 and newer motor vehicles. Reasonable precautions in an MMP must include, but are not limited to, the following conditions:
 - Labels must be placed on E15 retail dispensers indicating that E15 use is only for MY2001 and newer motor vehicles;
 - Product Transfer Documents (PTDs) must accompany all transfers of fuels for E15 use;
 - Parties involved in the manufacture of E15 must participate in a survey of compliance at fuel retail dispensing facilities; and
 - Any other reasonable measures EPA determines are appropriate.