EPA Announces E15 Partial Waiver Decision and Fuel Pump Labeling Proposal

The Environmental Protection Agency (EPA) is partially granting **L** a waiver to allow gasoline that contains greater than 10 volume percent ethanol and up to 15 volume percent ethanol (E15) for use in certain motor vehicles. We are partially approving the waiver for and allowing the introduction into commerce of E15 for use only in model year 2007 and newer light-duty motor vehicles, which includes passenger cars, light-duty trucks and sport utility vehicles (SUV). We are not approving the waiver for introduction of E15 for use in model year 2000 and older light-duty motor vehicles, as well as all heavyduty gasoline engines and motor vehicles, highway and off-highway motorcycles, and nonroad engines, vehicles, and equipment ("nonroad products" such as lawn mowers, chainsaws and boats) because there is currently insufficient test data to support an E15 waiver approval for these vehicles, engines, and products. The Agency is deferring a decision on the applicability of a waiver to model year 2001 through 2006 light-duty motor vehicles until additional test data, currently under development, is available.

This waiver decision includes certain conditions to reduce the potential for misfueling of E15 into vehicles, engines, and products for which it is not approved and to ensure fuel and ethanol quality. In addition, EPA is concurrently issuing a proposed rule with the express purpose of reducing the potential for misfueling of E15 into vehicles, engines, and products for which it is not approved. If finalized, this rule will satisfy the misfueling mitigation conditions of today's partial waiver.

E15 Waiver Decision

In March 2009, Growth Energy and 54 ethanol manufacturers petitioned the Environmental Protection Agency ("EPA" or "The Agency") to allow the introduction into commerce of up to 15 volume percent (vol%) ethanol in gasoline. In April 2009, EPA sought public comment on the Growth Energy petition and subsequently received about 78,000 comments. Prior to today's action, ethanol was limited to 10 vol% in motor vehicle gasoline (E10). While E15 is only 5% more ethanol than E10 when considering the total fuel portion, moving from E10 to E15 represents a 50% increase in the volume of ethanol present in gasoline and thus represents a 50% increase in the use of renewable fuels in gasoline.

The petition was submitted under Clean Air Act section 211(f)(4), which allows an applicant to demonstrate that a new fuel or fuel additive will not cause or contribute to the failure of an emission control system to achieve compliance with the emission standards to which it has been certified over its useful life. EPA reviewed the applicant's submission based on four criteria: 1) immediate and long term tailpipe emissions 2) immediate and long term evaporative emissions, 3) materials compatibility, and 4) driveability and operability.

MY2007 and Newer Vehicles

EPA's waiver decision allows but does not require the use of E15 in MY2007 and newer cars, light-duty trucks, and SUVs. This decision is based primarily on the Department of Energy's (DOE) Catalyst Study of 19 high sales volume car and light-duty truck models that were all designed for and subject to the Tier 2 motor vehicle emission standards. The purpose of the program was to evaluate the long-term effects of E0 (gasoline that contains no ethanol and is the certification test fuel for emissions testing), E10, E15, and E20 (a gasoline-ethanol blend containing 20 vol% ethanol) on the durability of the exhaust emissions control system, especially the catalytic converter (catalyst), for Tier 2 motor vehicles. Analysis of the motor vehicles' emissions results at full useful life (120,000 miles) and emissions deterioration rates showed no significant difference between the E0 and E15 fueled groups. These results confirm EPA's engineering assessment that the changes manufacturers made to their vehicles (calibration, hardware, etc.) to comply with EPA's Tier 2 emission standards have resulted in the capability of these vehicles to fuel with E15. The Tier 2 standards were fully phased-in for cars and light trucks by MY2007.

MY2001-2006 Motor Vehicles

EPA is deferring a decision on MY2001-2006 light-duty motor vehicles. DOE is in the process of conducting additional catalyst durability testing that will provide data regarding MY2001-2006 motor vehicles. The DOE testing is scheduled to be completed by the end of November 2010. EPA will make the DOE test results available to the public and consider the results and other available data and information in making a determination on E15 for use in those model year motor vehicles. EPA expects to make a determination for these vehicles shortly after the results of DOE testing are available.

MY2000 and Older Motor Vehicles and All Motorcycles, Heavy-Duty Gasoline Engines and Motor Vehicles, and Nonroad Products

We are not approving the waiver for MY2000 and older light-duty motor vehicles, as well as all heavy-duty gasoline engines and motor vehicles, highway and off-highway motorcycles and non-road products because there is currently insufficient test data to support an E15 waiver approval for these vehicles, engines, and products.

MY2000 and older motor vehicles have much less sophisticated emissions control systems than newer motor vehicles. At this time, there is insufficient data to demonstrate that the use of E15 will not cause or contribute to the failure of these motor vehicles to meet the emissions standards to which they were certified. In EPA's judgment, MY2000 and older motor vehicles may experience conditions that lead to emission increases if operated on E15. These concerns include the potential for catalyst deterioration or catalyst failure, as well as materials compatibility issues that could lead to elevated exhaust emissions and exceedances of the standards. For motorcycles and nonroad products, there are additional concerns with the use of E15.

Conditions on the Waiver

There are two types of conditions being placed on today's partial waiver: those for mitigating the potential for misfueling of E15 in all vehicles, engines and equipment for which E15 is not approved, and those addressing fuel and ethanol quality.

Conditions to reduce the potential for misfueling include the following:

- Parties involved in the manufacture and sale of E15, which include renewable fuel producers and importers, petroleum refiners and importers, and ethanol blenders, must submit a plan addressing the conditions of today's waiver to EPA for approval
- Retail fuel dispensers must have labels indicating that E15 is only for use in MY2007 and newer motor vehicles
- Product Transfer Documents (PTDs) must accompany all transfers of fuels for E15 use
- Parties must participate in a survey of compliance at fuel retail dispensing facilities to ensure adequate enforcement of labeling requirement.
- These conditions are also included in today's proposal as EPA believes these conditions are more practically met through rulemaking requirements.

For fuel quality purposes, E15 must meet ASTM International standards for ethanol. In addition, its Reid Vapor Pressure is limited to 9.0 pounds per square inch so that MY2007 and newer motor vehicles can meet evaporative emissions standards with E15 during the summertime gasoline volatility season (generally May 1 – September 15).

Notice of Proposed Rulemaking (NPRM) to Reduce the Potential for Misfueling

EPA is concurrently proposing a regulatory program to promote the successful introduction of E15 into commerce by ensuring that E15 is used in approved motor vehicles and reducing the potential for the misfueling of E15 into vehicles and engines for which it is not approved. The proposal includes several provisions that parallel the misfueling conditions on the E15 partial waiver. The proposed rule would:

- Prohibit the use of gasoline-ethanol blended fuels containing greater than 10 vol% and up to 15 vol% ethanol in vehicles and engines not approved for it
- Require all fuel dispensers to have a label if a retail station chooses to sell E15, and it seeks comment on separate labeling requirements for blender pumps and fuel pumps that dispense E85
- Require PTDs specifying ethanol content and RVP to accompany the transfer of gasoline blended with ethanol
- Require a national survey of retail stations to ensure compliance with the labeling provisions

In addition, the proposed rule would modify the Reformulated Gasoline ("RFG") program by updating the Complex Model to allow fuel manufacturers to certify batches of gasoline containing up to 15 vol% ethanol.

EPA is proposing the following E15 label:

CAUTION!

This fuel contains 15% ethanol maximum

Use only in: 2007 and newer gasoline cars 2007 and newer light-duty trucks Flex-fuel vehicles This fuel might damage other vehicles. Federal law **prohibits** its use in other

vehicles and engines.

Cost of Compliance of the Rule

The cost to industry to comply with the labeling proposal includes the periodic capital costs of labeling fuel dispensers, the one-time cost of the product transfer document requirements, and the annual cost of the survey requirements. The cost of the proposed labeling requirements is estimated at \$1.04 million per year on an annualized basis. The cost of the proposed product transfer document requirements is estimated at \$0.56 million per year on an annualized basis. The cost of the proposed survey requirements is estimated at \$2.05 million per year. The total cost of all of the proposed requirements is estimated at \$3.65 million per year. We believe these costs to industry will be offset by the avoided costs to consumers of repairing engines, vehicles, and equipment that would otherwise potentially have been damaged by misfueling.

Public Participation Opportunities

We welcome your comments on this proposed rule. Comments will be accepted for 60 days beginning when this proposal is published in the *Federal Register*. All comments should be identified by Docket ID No. EPA-HQ-OAR-2010-0448 and submitted by one of the following methods:

Internet: www.regulations.gov E-mail: A-and-R-Docket@epa.gov Mail: Environmental Protection Agency Air and Radiation Docket and Information Center (6102T) 1200 Pennsylvania Avenue NW Washington, DC 20460 Hand Delivery: EPA West Building EPA Docket Center (Room 3340) 1301 Constitution Avenue NW Washington, DC

For More Information

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

www.epa.gov/otaq/regs/fuels/additive/e15

For more information, please contact EPA's Fuels Program at:

U.S. Environmental Protection Agency Office of Transportation and Air Quality (6405J) 1200 Pennsylvania Avenue NW Washington, DC 20460 202-343-9755 E-mail: epafuelsprograms@epa.gov