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**Subcommittee on Energy and Environment**  
**Committee on Science, Space, and Technology**  
**U.S. House of Representatives**  
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**Written Statement**

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to come before you today to testify on EPA's response to a request by ethanol producers to allow gasoline containing more than 10% ethanol and up to 15% ethanol (E15) to enter the marketplace.

Under the Clean Air Act (the Act), companies cannot increase the concentration of ethanol in gasoline unless the Administrator determines that the increased concentration will not cause or contribute to the failure of vehicles or engines to meet emissions standards. To date, the Act allows gasoline containing up to 10% ethanol to be introduced into commerce for use in conventional-fueled vehicles and fuel containing up to 85% ethanol to be introduced for use in flexible-fueled vehicles. Ethanol producers filed a request that EPA increase the permissible concentration of ethanol in gasoline to 15 percent, which EPA granted in part and denied in part.

In reaching this decision, EPA considered all of the available evidence, including extensive test data developed by the Department of Energy (DOE) and other researchers. Based on this evidence, EPA determined that the Clean Air Act criteria were met for allowing E15 to be introduced into commerce for use in model year (MY) 2001 and newer cars, light trucks and other passenger vehicles. EPA also found that the Act's criteria were not met for older passenger vehicles and other types of vehicles and gasoline-powered equipment because there were

insufficient data to allay engineering concerns that the less sophisticated engines and emission controls of these products could accommodate E15.

As a result, EPA raised the permissible concentration of ethanol in gasoline to 15 percent for gasoline for use in MY 2001 and later passenger vehicles, but did not raise the permissible concentration in gasoline for other uses. To reduce the potential for misfueling with E15, EPA required that fuel producers that decide to introduce E15 into commerce take a number of steps, including labeling E15 pumps. In addition, the Agency recently issued national regulations to further reduce the risk of misfueling.

As a new gasoline, E15 must be registered under the Clean Air Act before it may be introduced into commerce. Since EPA has yet to receive or act on a complete E15 registration application, E15 may not yet be lawfully sold.

### The Clean Air Act Fuel Waiver Process

Under the Clean Air Act, EPA has an important but limited role to play in determining whether a new fuel or fuel additive may enter the market. To protect public health and the environment, the Agency sets standards to control air pollution from many kinds of sources, including cars, trucks and non-road engines and equipment. To protect the ability of mobile sources to meet those standards, the Clean Air Act prohibits the introduction into commerce of motor vehicle fuel that is not “substantially similar” to the fuel used to determine whether those sources meet emission standards. Manufacturers of cars, trucks and equipment design their products to meet standards based on use of the fuel in EPA’s test procedures.

For fuels like E15 that are not substantially similar to test fuel, the Clean Air Act authorizes EPA to grant a waiver of the prohibition against introduction into commerce if a demonstration is made that the fuel will not cause or contribute to vehicles or engines failing to meet applicable standards over their full useful life. The Act requires EPA to respond to a waiver request within 270 days of receipt and to provide public notice of, and an opportunity to comment on, the waiver application.

In acting on waiver requests since the 1970s, EPA has articulated two basic approaches for making the required demonstration of a new fuel’s emissions impact – (1) a representative, statistical sampling and testing program, or (2) a reasonable engineering theory about emissions effects and data to confirm the

theory. Both of these approaches reflect that it is not feasible to test every vehicle or piece of equipment to determine how its emissions would respond to a new fuel. Instead, each approach calls for sufficient data to reasonably conclude that the new fuel will not cause or contribute to failure to meet emissions standards. The burden is on the waiver applicant to make the demonstration, although EPA considers information submitted by the public and other available information in making its waiver decisions. An EPA decision to grant a waiver request allows, but does not require, the waived fuel to be made or sold.

### The E15 Waiver Request and Decision

EPA received a waiver request for E15 from Growth Energy and 54 ethanol producers in March 2009. The Agency sought public comment on the application, including the information submitted in support. EPA notified the waiver applicants in November 2009 that there was not sufficient data to support granting the waiver request at that time. However, in light of an ongoing DOE test program on component durability, the Agency stated that it would wait to make a decision on the waiver request until the results of the vehicle test program were available.

DOE had begun developing the vehicle test program in 2007 to study the potential effects of ethanol blends greater than E10 on conventional gasoline-fueled vehicles and equipment. This was done in response to both President Bush's initiative to reduce petroleum consumption by 20% in 10 years and enactment of the Energy Independence and Security Act (EISA). As part of EISA, Congress required a significant increase in the amount of biofuels that must be added to transportation fuel under the Renewable Fuel Standard (RFS) program. DOE developed this test program as part of a larger DOE effort to identify different pathways for meeting the ambitious RFS2 volume requirements, considering vehicle technology, allowable levels of ethanol in fuel, the fuel distribution network, and other factors. DOE consulted with EPA and a wide array of stakeholders in designing its vehicle test program.

After the E15 waiver request was submitted, DOE modified its test program so that it would produce data useful for making a waiver determination. In view of EISA's bipartisan mandate for increasing biofuels as a means of reducing petroleum use and emissions, a concerted effort was made to expedite the testing and share the results with stakeholders and the public. As EPA indicated in a letter to the Alliance of Automobile Manufacturers and on its webpage, DOE's test data were placed in the docket for the waiver request as the data became available and were checked for accuracy and completeness. This allowed members of the public

to review and comment on it, as many did. EPA also responded to inquiries about the test data.

As DOE testing was completed, first for MY2007 and newer light-duty vehicles and later for MY2001-06 light-duty vehicles, EPA considered the test data along with other available information to determine whether the statutory test for granting waivers had been met. Based on the sound technical rationale detailed in the Agency's October 2010 and January 2011 waiver decision documents, the Administrator concluded in these decisions that the statutory criteria were met for MY2001 and newer light-duty vehicles and not for older such vehicles or other types of vehicles, engines and equipment. The Administrator's decision thus increased the permissible concentration for ethanol to 15 percent, but only for use in MY2001 and newer light-duty vehicles.

To protect other vehicles, engines and equipment from being misfueled, the Administrator's decision placed conditions on the introduction of E15 into commerce for use in MY2001 and newer light-duty vehicles. It also included conditions to ensure ethanol quality and volatility control. Rather than attempt to reiterate here EPA's extensive technical basis for granting the waiver in part and denying it in part, I refer you to the decision documents and welcome the opportunity to answer any questions you may have about the decisions.

### Related Steps

To further reduce the risk of misfueling, EPA recently issued a final rule establishing national requirements for E15 pump labeling, product transfer documents and retail station surveys. We received many suggestions and comments about how we could improve our proposed misfueling mitigation program, and we believe the final rule is stronger as a result. We worked closely with labeling experts from the Federal Trade Commission in designing a label that effectively communicates the essential information consumers need to avoid misfueling. We also enhanced the ability of product transfer documents to communicate the information fuel blenders, distributors and retailers need to properly blend and market E15. It is important to note that the misfueling mitigation rule requirements are designed to work in tandem with the related conditions of the partial waivers, so that the fuel producers benefitting from the waivers continue to have an important role to play in mitigating misfueling.

A number of additional steps need to be taken before E15 can enter the market, and many of those steps are not under EPA's control. As I indicated

previously, we have not yet received a complete application to register E15 as required by the Clean Air Act. Stations that want to sell E15 will need to consider whether changes are needed to fuel dispensing equipment to meet other federal, state and local requirements. Since a number of states restrict the sale of gasoline-ethanol blends, law changes may also be needed in those states before E15 may be sold there. EPA has a role in setting standards for the compatibility of existing underground storage tanks (UST) with E15, and the agency recently issued guidance to help UST owners and operators meet existing federal UST compatibility requirements. As E15 enters the marketplace, EPA is committed to working with stakeholders to monitor developments and help address any issues within the Agency's jurisdiction.

Thank you for the opportunity to testify today.