



EPA Seeks Comments on 15% Ethanol Blend

Posted by [Gail the Actuary](#) on May 11, 2009 - 10:00am

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The EPA is proposing increasing the maximum amount of ethanol that can be blended into gasoline from 10% to 15%, so that ethanol producers will have a way of increasing the amount of ethanol that can be sold. The comment period for the new rule runs 30 days from April 21, so the time to make comments is in the next few days, before May 21. EPA's decision on the new rule is not expected until December 2009.

I think quite a number of Oil Drum readers would oppose this increase.

One reason comes from the impact on automobiles and other motors using the fuel. Raising the percentage of ethanol above 10% would void automobile warranties. Some types of engines, such as boat engines, may be damaged, [especially if the engines are not used for extended periods](#), and the ethanol separates out. It is not clear that adequate testing has been done regarding the safety of E15.

There is also a question of whether one wants to encourage increased corn ethanol production. The production of corn ethanol requires that we import greater amounts of fertilizer. Because of this, increasing corn ethanol exchanges one import dependency for another. Corn is sometimes irrigated, and this puts pressure on depleting aquifers. Corn ethanol seems to be nearly as bad as gasoline from a global warming gas perspective, especially when the change in land use is considered, so a switch provides little benefit from this perspective.

The regulation in question is [#EPA-HQ-OAR-2009-0211](#). This [link](#) is the place for adding comments.

Addendum: In reviewing the [notice](#) regarding the change, it looks like the EPA is considering the possibility of permitting E15 for some uses, but not others. This adds a whole new set of problems--whether users will intentionally misfuel with the cheaper fuel, and whether gasoline sellers can practically keep multiple blends on hand. Below, I have copied in the discussion from the notice:

Context of Growth Energy's Waiver Application

On March 6, 2009, Growth Energy and 54 ethanol manufacturers submitted a waiver application to the Administrator, pursuant to section 211(f)(4) of the Act, for ethanol-gasoline blends containing up to 15 percent ethanol by volume ("E15").

Growth Energy maintains that under the renewable fuel program requirements of the Energy Independence and Security Act of 2007, which is now primarily satisfied by the

use of ethanol in motor vehicle gasoline, there exists a “blend barrier” or “blendwall” by which motor vehicle gasoline in the U.S. essentially will become saturated with ethanol at the 10 volume percent level very soon. Growth Energy maintains that a necessary first step is to increase the allowable amount of ethanol in motor vehicle gasoline up to 15 percent (E15) in order to delay the blendwall. They also claim other ways of delaying the blendwall could include adding more stations offering E85 blends and bringing in the renewable fuel mandate specified in the Energy Independence and Security Act of 2007. For its part, Growth Energy claims that the “blendwall” will make those renewable fuel mandates unreachable and that there are substantial environmental benefits associated with higher ethanol blends.

Growth Energy states in its waiver application that its supporting studies and extensive experience with ethanol support a conclusion that E15 will not cause or contribute to the failure of an emission control system such that the engine or vehicles fails to achieve compliance with its emission standards.

In addition to the information that Growth Energy submitted, EPA is aware that several interested parties are investigating the impact that mid-level blends (e.g., E15 or E20) may have on vehicles and equipment. These testing programs are evaluating emissions impacts as well as other types of impacts (i.e., catalyst, engine, and fuel system durability, and onboard diagnostics) on vehicles and equipment. The Department of Energy, working in conjunction with the Coordinating Research Council and other interested parties, is leading a substantial testing effort. Results from this program to date are referenced in Growth Energy’s waiver request, and we expect additional data will be added to the docket as it becomes available.

One potential outcome at the end of our process, after reviewing the entire body of scientific and technical information available to us, may be an indication that a fuel up to E15 could meet the criteria for a waiver for some vehicles and engines but not for others. Some vehicles and engines may be more susceptible to emission increases or durability problems that cause or contribute to these vehicles or engines failing to meet their emissions standards. Assuming the criteria are met for a certain subset of vehicles, one interpretation of section 211(f)(4) is that the waiver could be approved in part for only that subset of vehicles or engines for which testing supports its use and for which adequate conditions or other measures could be implemented to ensure its proper use.

Another potential outcome is a conclusion that ethanol blends of greater than 10 percent, but less than 15 percent, warrant a waiver. To take such action, the Agency would need similar evidence, such as emissions durability testing, as what would be needed to address a waiver for a 15 percent blend.

Any approval, either fully or partially, is likely to elicit a market response to add E15 blends to E10 and E0 blends in the marketplace, rather than replace them. Thus consumers would merely have an additional choice of fuel.

Experience in past fuel programs has shown that even with consumer education and fuel implementation efforts, there sometimes continues to be public concern for new fuel requirements. Several examples include the phasedown of the amount of lead allowed in gasoline in the 1980s and the introduction of reformulated gasoline (RFG) in 1995. Some segments of the public were convinced that the new fuels caused vehicle problems or decreases in fuel economy. Although substantial test data proved otherwise, these

concerns lingered in some cases for several years. As a direct result of these experiences, EPA wants to be assured that prior to granting a waiver, sufficient testing has been conducted to demonstrate the compatibility of a waiver fuel with engine, fuel and emission control system components.

EPA has previously granted waivers with certain restrictions or conditions, including requirements that precautions be taken to prevent using the waiver fuel as a base fuel for adding oxygenates, that certain corrosion inhibitors be utilized when producing the waiver fuel, and that waiver fuels meet voluntary consensus-based standards such as those developed by the American Society for Testing and Materials (ASTM). In a partial waiver for fueling certain types of vehicles or engines, the condition placed on the fuel manufacturer would be that the fuel is only used in certain vehicles or engines (i.e., E15 is only used in the subset of vehicles or engines identified in the partial or conditional waiver).

EPA recognizes that there may be legal and practical limitations on what a fuel manufacturer may be required or able to do to ensure compliance with the conditions of the waiver, including preventing misfueling. EPA has not previously imposed this type of “downstream” condition on the fuel manufacturer as a condition for obtaining a section 211(f)(4) waiver.

EPA does, however, have experience with compliance problems occurring when two types of gasoline have been available at service stations. Beginning in the mid-1970s with the introduction of unleaded gasoline and continuing into the 1980s as leaded gasoline was phased out, there was significant intentional misfueling by consumers. At the time most service stations had pumps dispensing both leaded and unleaded gasoline and a price differential as small as a few cents per gallon was enough to cause some consumers to misfuel.



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