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Ethanol's Use In Gasoline Production Would Be The Same With Or Without RFS Waiver

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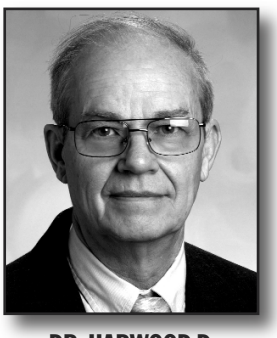

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As a result of sharply increased corn prices that resulted from the drought this past summer, several states requested that the US Environmental Protection Agency (EPA) a waiver of the renewable fuel standard (RFS). In making her August 14, 2012 plea "on behalf of the State of North Carolina," Governor Beverly Perdue writes, "I hereby request that the applicable volume of renewable fuel be waived.... The imposition of a 15 .2 billion gallon renewable fuel standard (RFS) in 2012, coupled with the prospect of a 16.55 billion gallon standard in 2012, has imposed severe economic harm to my state's swine, poultry, dairy, and cattle producing regions."

At the end of her letter she asserts, "Altogether, severe economic harm is being experienced by the State of North Carolina and many of its agricultural regions, as well as important economic sectors in the state, as a direct result of the implementation of the applicable volume requirements of the RFS. This harm could be alleviated by a waiver of the RFS applicable volume for renewable fuel in 2012 and 2013.

"Granting a waiver now would allow for the waiver to extend into the 2012 harvest season and a large part of the 2013 growing season. I therefore ask that you consider a full range of waiver options...including waiver of the full amount of the applicable volume of the RFS...to allow the maximum impact on the price of feed grain in 2012 and 2013."

On November 16, 2012, the EPA denied the request of Governor Perdue and others. The short story is that while the EPA recognizes the impact of the drought on livestock producers, "the agency's extensive analysis makes clear that Congressional requirements for a waiver have not been met and that waiving the RFS would have little, if any, impact on ethanol demand or energy prices over the time period analyzed."

The longer story is contained in EPA's 83 page notice of their decision regarding the request for a waiver of the RFS (see http://www.epa.gov/otaq/fuels/renewablefuels/notices.htm for a current link to the Federal Register copy of the notice). One of the interesting parts of the "longer story" concerns the role that ethanol currently fulfills in the production of gasoline. Let us pick up this portion of the story directly from the EPA decision.

In assessing the impact of implementing the RFS volume requirements in the 2012/2013 time frame on ethanol production, a key consideration is the economic incentives for refiners to use ethanol during that time frame as well as the ability of refiners and fuel blenders to reduce, over that one-year timeframe, the quantity of ethanol being blended into the gasoline pool.

Currently most refiners produce a sub-octane unfinished gasoline lacking oxygenates called blendstocks for oxygenate blending (BOBs). They then blend ethanol into gasoline for purposes of boosting gasoline octane levels. Ethanol has an octane value of 115 (R+M/2) while finished gasoline's pump octane value ranges from 87 – 93.41 Ethanol also has a value as a gasoline extender when blended into the gasoline pool.

Other properties of ethanol, such as its volatility and low sulfur and benzene content, influence its value to refiners. Over the waiver period requested by the states, each refiner is expected to make decisions about ethanol blending independently, in light of the value they place on these factors and the complexity and uniqueness of each refinery. Where the blending of ethanol is profitable to refiners *we expect that they would continue to blend ethanol into the gasoline pool even in the absence of a renewable fuel requirement* (emphasis added).

At current ethanol and crude oil prices, the blending of ethanol into gasoline is an economically beneficial practice for refiners, and based on forecasts used by the EPA this is expected to continue through at least 2013. However if that were to change and blending ethanol into gasoline was no longer an economically beneficial practice for refiners, the EPA believes that the challenges at both the refinery level and in the refined product distribution system would be significant deterrents to reductions in ethanol blending in response to a one-year waiver.

To reduce their use of ethanol refiners would have to a) seek alternative high octane blend stocks or b) significantly adjust refinery operations to make up for the volume and octane increase they currently receive from ethanol. In addition logistical challenges to the refined product distribution system would also have to be overcome in parallel with the necessary refinery operation changes.

Given the significant investments refiners have made in adapting their production and distribution systems to the availability of ethanol, it appears unlikely that they would be able to accomplish the changes necessary to significantly reduce the amount of ethanol used for the 2012-2013 corn marketing year. This is confirmed by a comment from the American Petroleum Institute, Chevron, and Marathon Petroleum Company stating that a one-year waiver would be unlikely to result in a significant decrease in ethanol blending.

Without a reduction in demand for ethanol by refiners, little would be gained by granting the waiver. Δ

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