

Focus on Fuels

In This Issue

TM&C Services

A Brave New RFS2 World of Commonsense



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TM&C Services in Fuel Regulations

TM&C provides a full range of services in its fuels regulatory practice. Some of these services are listed below:

- Preparing, reviewing and submitting fuels reports, including CDX submissions.
- Facility audits for compliance with fuels programs.
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11

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Psst, have you heard that the EPA announced that they intend to publish a notice of proposed rulemaking for the 2014 RFS2 RVO requirements? Of course you've heard. Everybody knows. We have already received press releases from China with the only recognizable information in the release being a table of the proposed RFS2 obligations. But what you haven't heard is our first impressions on what this means for the renewable fuel program.

A Brave New RFS2 World of Commonsense

by Tom Hogan

A Real Cliffhanger

First, we have recognized and written about the structural problems with the RFS2 program for quite some time. However, the EPA did not react to the problems in 2013 when the program showed itself to be clearly unsustainable. Instead, they drove up to the cliff, looked in the abyss and decided not to drive over the cliff into uncharted territory, which could have easily led to fuel shortages in the U.S.

Briefly, the proposed 2014 renewable fuel obligation includes a reduction in the total renewable fuel from 18.15 to around 15.2 billion gallons. There are a couple of other points expected to be in the promised NPRM, but they are minor compared to the reduction in the total renewable fuel obligation.

RVO Tied to Ability to Absorb in Transportation

EPA to pose fuels related questions.

- Industry specialist assistance for required gasoline attestations.
- Industry specialist assistance for in-line blending audits.
- Assistance in setting up a fuels compliance group/program.
- Personnel reviews of compliance related groups.
- Compliance status reviews and recommendations .
- Negotiations/consultation during EPA enforcement actions.
- 3rd Party Engineering reviews.
- Due diligence reviews of facilities and companies in RFS RINs Program.

Pool

The regulations allow the EPA to reduce the RVO mandates, " ... based on a determination by the Administrator, after public notice and opportunity for comment, that there is an inadequate domestic supply." EPA exercised this authority for cellulosic biofuel in every year because the annual supply of cellulosic biofuel was much less than 20 million gallons, while the mandate increased to 1 billion gallons in 2013. However, the administrator had never exercised this option for any of the other categories even though those categories included the cellulosic mandate. EPA proposes to exercise this option for advanced biofuel and for total renewable fuel in 2014. The key assumption, which is also most likely to be the primary point contested in expected lawsuits from the renewable fuel industry, is that the EPA determined that although the biofuel industry might be able to produce these biofuels, it was not possible to get those fuels to market (primarily ethanol) because the gasoline infra-structure could absorb no more than 10% ethanol due to the blendwall. This logic, and the application of it to this program, is revolutionary to the RFS program.

The shift in philosophy will have many implications for the various stakeholders. One of the more interesting implications is that if the RVOs continue to consider only the amount of ethanol that can be absorbed in E10, plus small amounts of E85; and, if cellulosic ethanol becomes an economic reality, the cellulosic and corn-derived ethanol producers will be left to fight over a fixed market. It's unlikely that the cellulosic ethanol production will be significant in the near future. However, the RFS regulations do not have a sunset provision, and whenever cellulosic becomes economic, the competition begins.

The philosophy of setting the renewable fuel obligation based on the expected market (E10 plus E85 consumption) indicates that the EPA does not expect the RIN prices to be an incentive for growing the ethanol markets above E10, specifically E15 and E85. This is an interesting development since RFS2 was designed to increase ethanol content in gasoline to more than 20%. Without some mandate for a given production level of E15 or E85, it is not likely that this market will grow enough by 2022 to allow blending the RFS2 mandated volumes.

What to Learn from the Proposed Bio-mass Based Diesel RVO

The intended proposed regulations set the biomass-based diesel obligation at 1.28 billion gallons per year for 2014 and 2015, the same level as 2013. The proposal includes a discussion on how the EPA decided to set this RVO. The EPA noted that the existing biodiesel credit of \$1 per gallon credit was only authorized through December 31, 2013; and, if not renewed, production of biodiesel is likely to decrease. In

addition, the EPA notes that the biodiesel capacity is greater than 1.28 billion gallons, but there may be product quality issues if the percentage of biodiesel increases significantly. These are all reasonable observations, but the discussion on the expiring biodiesel credit is quite interesting. If the biodiesel credit expires, the RIN value could theoretically increase to offset the loss of the credit if it were needed to incentivize the production of biodiesel. Again, it looks like the EPA is not looking to the price of RINs to incentivize the production and use of biodiesel. This is consistent with the apparent philosophy of not using the RIN price to incentivize the production of gasoline with ethanol content in excess of E10.

Paradigm Shift in Ownership

Limiting the RVO (and thus the ethanol) mandates as proposed, and institutionalizing the method for all future years is likely to stall the ethanol used in the U.S. at about 10% of the gasoline pool (about 13 billion gallons in 2014, probably drifting down as gasoline demand decreases due to CAFE standards) for the foreseeable future vs. a mandated volume of ethanol in 2022 at around 30 billion gallons.

A paradigm shift occurs under the proposed RVOs in optimal asset ownership. If RINs were expensive for a long period of time, like in early 2013, there is an economic incentive for refiners to own the biofuel production facilities. The reason is pretty simple. It doesn't cost anything to generate a RIN. Obligated parties can use RINs from biofuel production facilities they own. This saves the cost of RINs; which, at \$1 per gallon, would be \$36 billion for the obligated parties in 2022; that is, if the entire original mandate of 36 billion gallons is enforced. Under the proposed program, it might be better for the ethanol producers to use ethanol they produce in excess of the mandate to produce E85.

Two Tier Ethanol Values

Ethanol economics are based on the cost of corn and the value of ethanol. However, ethanol's value is different in E10 vs. E85. Gasoline marketers have been able to sell E10 as gasoline giving the ethanol a gasoline value. However, to grow an E85 market, the E85 price would need to at least reflect the lower per gallon mileage. E85 gets about 25-30% less mileage than E0 and about 22-27% less than E10. That means that in a \$3 per gallon world, the E85 price must be about 65 to 70 cents per gallon less than the E10. In addition, the ethanol portion of the E85 must be priced to overcome all of the price disadvantage because the gasoline portion could have been sold at gasoline price. Therefore, the ethanol value in E85 would be on the order of 75 to 82 cents per gallon lower than ethanol value in E10.

The two-tiered value of ethanol in the transportation pool creates a problem for an ethanol producer. How can you differentiate between ethanol used for E10 vs. E85?

How can you sell ethanol at two tiers? The only sure way is if the ethanol producer becomes the producer of the E85. The ethanol producer would only produce E85 if the incremental cost of ethanol could justify production. At the same time, the ethanol producer would sell ethanol into the E10 market at a higher price. That's the reason why it could become economic for the ethanol producer to blend E85, in order to protect the higher-valued ethanol in E10 while maximizing production that covers incremental costs.

What's Next

Where do we go from here? It depends on how you define "we." The renewable fuel producers and interested parties are almost certain to begin a full court press on legal challenges and rallying any political support available. There will be varied interests in the biofuel community as the cellulosic and corn ethanol producers sort out what to do about a limited ethanol market. The petroleum refining industry and transportation fuel importers will continue to attempt to eliminate the entire RFS mandate, which will still cost them on the order of \$3 billion per year even under the scaled-back mandate.

The clear winners in this, for at least 2014, are the consumers and the U.S. economy. Left unchecked, the original mandate of 18.15 billion gallons of renewable fuel would have been achievable only by drawing down all of the prior year RIN inventory and the perfect distribution of RINs produced in 2014. Anytime a plan requires "perfection," it almost certainly is doomed to falling short of the goal. By 2015, the original mandate would not have been achievable, and there would have likely been a shortfall of fuel supply and the accompanying dreaded gas lines.

EPA has scheduled a hearing in Washington, D.C., on the intended proposed rules for December 5, 2013.

CAUTION - A Dormant Program Can Come Back from the Dead

If the program is administered in the future as proposed, it is likely that ethanol demand in the near future will stall and probably decrease. However, much like the CAFE standards, which remained unchanged for over 20 years and were then resurrected, a dormant RFS program could be resurrected at any time. Unless the market is very different than today, resurrecting the program on short notice could result in significant market distortions, including higher fuel prices and potentially inadequate supply.

Also, don't forget the EPA has merely announced their intent to publish a notice of proposed rulemaking. There are months to go before any of this is finalized.

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