Fixing the Renewable Fuel Standard ("RFS")
Close the "Blender Loophole"
November 3, 2016

The Clean Air Act required EPA to place the RFS compliance obligation on "refiners, blenders, and importers, as appropriate" to ensure that the statutory volumes would be met and to allow only "obligated parties" to participate in the RIN market 42 U.S.C. §§ 7545(o)(3)(B)(ii)(I), (o)(5). EPA chose to obligate refiners and importers, exempting non-refining blenders, but allowing them to participate in the RIN market, creating a loophole that is defeating the program, destroying competition, and attracting criminal activity to the RIN market.

The Department of Energy in its 2011 study for Congress, predicted that parties that generated RINs through blending would have a significant economic advantage over refineries that complied by purchasing RINs and that parties that have "excess RINs" would have an even greater advantage. See attached excerpt, DOE Small Refinery Exemption Study, 2011.

In 2016, EPA rejected DOE's Study conclusions, claiming that refineries that have RIN costs can simply pass them through the supply chain and stated:

> [C]ontrary to statements in this paragraph from the DOE Study, it has been found that a refinery does not experience disproportionate economic hardship simply because it may need to purchase a significant percentage of its RINs for compliance from other parties, even though RIN prices have increased since the DOE study, because the RIN prices lead to higher sales prices obtained for the refineries' blendstock, resulting in little or no net cost of compliance for the refinery.

RIN cost pass through is a red herring and demonstrates a fundamental lack of understanding of basic economics. When one refiner has a cost that another does not, it cannot recover that cost in a competitive market. Wall Street knows it and the financial reports of the regulated and exempt entities reflect the market distortion and the winners and losers.

As a result of the blender loophole, merchant refiners are transferring billions of dollars each year to their competitors, deepening the competitive disadvantage merchant refiners suffer relative to their larger competitors.

The placement of the obligation on refiners and importers, and allowing unregulated entities to participate in the RIN market has encouraged criminal activity. Doug Parker, the former federal officer responsible for investigating RIN fraud, has explained that the opportunity for RIN fraud is created by the extended chain of custody of RINs. Shortening the chain of custody by making unobligated parties obligated would decrease the opportunities for fraud.

By allowing unobligated parties to generate RINs from blending any amount of renewable fuel, rather than just the amount blended in excess of the statutory volume as provided in the Clean Air Act, EPA has created a $15 billion market that is attracting criminal activity and Russian trading company Gunvor USA, LLC, recently announced plans to open a U.S. RIN trading operation in Houston.

Small Refinery Exemption Study

An Investigation into Disproportionate Economic Hardship

Office of Policy and International Affairs

U.S. Department of Energy

March 2011

11. Each 20% rollover cap includes the sum of all the RINs being carried over for all the categories.

12. The 1.5 multiplier for Biomass Based Diesel is not applicable if volumes are expressed in terms of paper Gallon-RINs instead of physical gallons.

13. A D Code 7 Cellulosic Diesel RINs can be applied to either the Cellulosic RVO or the Biomass Based Diesel RVO, but not both.

Other comments from the conference calls with the US EPA are as follows:

1. Although there is a provision in the Final Rule to carry over 57% of 2010 Biomass Based Diesel RVO into 2011, the degree of complexity experienced in 2010 is not anticipated to occur in 2011. This is because no more "Used" prior year RINs are allowed and no more "Unused" RINs from 2 years prior are allowed.

2. Based on Table IV.B.3-2 on page 14752 of the Final Rule, from a practical standpoint there will be little or no D Code 7 (Cellulosic Diesel) RINs generated during 2008 and 2009. At the time of this writing, the US EPA does not recognize D Code 7 or D Code 5 RINs under RFS1 which lasted until June 30, 2010. However, Brazilian sugar cane ethanol imports would qualify as an Other Advanced Biofuel with a 50% GHG reduction and a D Code 5 RIN.

Average vs. Marginal Ethanol RINs:

The impact on refiner margins of a rapid rise in RINs prices can be illustrated by discussing the economics of three refiners in different circumstances relative to the RFS. In the illustration, Company A blends all its production with ethanol, so it does not have to purchase ethanol RINs. Company B does not do any blending and must purchase RINs to meet all of its RVO. Company C has excess RINs to sell into the market. Company C could be a blender that does not have an RVO, i.e. a gasoline marketer, or it could be a refiner who blends in excess of its RVO.

	Average Values (over 11 months)			Marginal Values (December)		
Values in Cents per Gallon	Company A Blends to meet RVO	Company B Buys RINs to meet RVO	Company C has RINs to sell	Company A Blends to meet RVO	Company B Buys RINs to meet RVO	Company C has RINs to sell
Gasoline Price	200.00	200.00	200.00	200.00	200.00	200.00
Ethanol Price	190.00	n/a	190.00	190.00	n/a	190.00
Price Difference	10.00	n/a	10.00	10.00	n/a	10.00
Fuel margin/gallon of E10	1.00	n/a	1.00	1.00	n/a	1.00
VEETC (cpg of E10)	4.50	n/a	4.50	4.50	n/a	4.50
RINs Price (cpg of ethanol)	n/a	1.50	1.50	n/a	15.00	15.00
RINs Price (cpg of E10)	n/a	0.15	0.15	n/a	1.50	1.50
Blender Margin (cpg of E10)	5.50	n/a	5.65	5.50	n/a	7.00
Total Cost (cpg of E10)	194.50	200.15	194.35	194.50	201.50	193.00
Advantage vs. B (cpg of E10)	5.65		5.80	7.00		8.50

In the above example, the companies experience an average price for gasoline, ethanol and RINs for eleven months of a year. In the last month, December, RINs prices increase by ten times, from 1.5 cpg to 15 cpg. The average RIN price is 1.5 cpg and the marginal RIN price is 15 cpg.

The companies value their gasoline at 200 cents per gallon and ethanol at 190 cpg. Companies A & C have a fuel margin on a gallon of E10 of 1 cpg, (10 cpg gasoline price – ethanol price times 10%.) They reduce their excise tax obligation with the VEETC by 4.5 cpg of E10.

Company A does not have to buy any ethanol RINs, so its "Blender Margin" is the fuel margin of 1 cpg + the tax credit of 4.5 cpg or 5.5 cpg. This reduces the cost of its product to 194.5 cpg. Company B does not blend and has to buy RINs. Its total cost is 200.15 cpg. Company C blends ethanol, reduces its taxes and sells a RIN. This reduces its cost to 193.00 cpg.

On average, Company A has a cost advantage over Company B of 5.65 cpg and Company C has an advantage over Company B of 5.8 cpg.

In the final month, when RINs prices go to 15 cpg, Company A's advantage vs. Company B grows to 7.00 cpg and Company C's advantage grows to 8.50 cpg. Assuming a net refining margin of 5 cpg, high RIN prices could significantly impair the profitability of non-blending small refineries.