Docket ID No. ID No. EPA–HQ– OAR–2013–0479

Comments by: Advanced Biofuels USA, www.advancedbiofuelsusa.org a 501 (c) (3) not-for profit educational organization. ABFUSA is not a manufacturer trade organization.

Topic:

ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 80
[EPA-HQ-OAR-2013-0479; FRL- 9900–90–
OAR]
RIN 2060-AR76
2014 Standards For The Renewable Fuel Standard Program

Comments by Advanced Biofuels USA

In regard to the determination of the Applicable Volume of ethanol and other biofuels allowed for Renewable Identification Number (RIN) credits in 2014, Advanced Biofuels USA finds that EPA has disregarded the intent of both the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 (EISA) that established the Renewable Fuel Standard program.

The quantities of RIN biofuels that EPA is proposing for 2014, approximately 9.8 percent ethanol, represents an acceptance of the status-quo fuel baseline of E10 (10 percent ethanol content) rather than establishing a reasonable increase in ethanol content, based on achievable markets, that would have been in line with the intent of the legislation, which was to increase biofuel use in the United States. This intent to increase biofuel use is clearly evident in that the Renewable Fuel Standard text established a monetary disincentive for petroleum refineries to not increase biofuel content of their motor vehicle fuel blends.

Therefore, while meeting the intent of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 would have required petroleum refineries to make financial decisions to either invest in R&D and/or infrastructure improvements that would have created new biofuel markets or to pay for RIN credits, EPA's RFS biofuel quantity decision has instead reduced the value of biofuel use that Congress had written into law as having virtually no monetary value.

This decision by EPA is not only in opposition to the intent of Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 but also to specific portions of the legislation and, perhaps more importantly, regulatory initiatives undertaken by EPA in response to Congressional mandates to increase ethanol consumption. Specifics include:

Renewable Fuel Volume Determination Language

Were Applicable Criteria Used?

Section 202, Renewable Fuel Standard, of the Energy Independence and Security Act of 2007 established six criteria to determine renewable fuel volumes eligible for RIN credits.

> (I) the impact of the production and use of renewable fuels on the environment, including on air quality, climate change, conversion of wetlands, ecosystems, wildlife habitat, water quality, and water supply;
>
> (II) the impact of renewable fuels on the energy security of the United States;
>
> (III) the expected annual rate of future commercial production of renewable fuels, including advanced biofuels in each category (cellulosic biofuel and biomass-based diesel);
>
> (IV) the impact of renewable fuels on the infrastructure of the United States, including deliverability of materials, goods, and products other than renewable fuel, and the sufficiency of infrastructure to deliver and use renewable fuel;
>
> (V) the impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods; and
>
> (VI) the impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and food prices.

In determining the 2014 eligible fuel quantities, EPA concentrated primarily on three criteria: 1) the annual rate of renewable fuel production, 2) the renewable fuel delivery infrastructure, and 3) the projected renewable fuel consumption in 2014 if the status quo was maintained.

The consideration of the annual rate of renewable fuel production Section 202 (III) appears to a primary criteria used by EPA as demonstrated by the extensive company by company assessment (II. B.4.) included in the proposed regulations.

The ability of the current, *not improved with the expenditure of refinery investments in lieu of RIN purchases*, renewable fuel delivery infrastructure (IV) was considered in Assessment of E85 Consumption (IV. B.b.).

However, it is hard to see where the consideration of status quo (without implementation of EPA and other government biofuel initiatives) biofuel consumption estimates, C. Determination of Reductions in Advanced Biofuel, fits in the six criteria included in Section 202 of EISA.

Therefore, it seems clear that any conclusions drawn by EPA from this estimated status quo fuel use may not be used in the determination of 2014 renewable fuel volumes.

Were Applicable Criteria Used Correctly?

The analysis of the annual rate of renewable fuel production (III) and the analysis of the renewable fuel delivery infrastructure (IV) while backed with sufficient data were misused in that they created a logical tautology in the overall renewable fuel volume analysis that would never allow for an increase in the use of additional biofuels in the United States.

The tautology goes something like this:

- An insufficient supply of E85/E30/E15 “blend” fuel pumps exists to fuel Flex-Fuel Vehicles, E15 certified vehicles, or intermediate ethanol use vehicles.
- Therefore, no additional ethanol will be sold above the E10 status quo.
- With no additional ethanol being sold, there is no demand for new cellulosic ethanol plants to be built.
- Therefore, with no new ethanol production there is no demand for additional E85/E30/E15 “blend” fuel pumps to be installed.
- And, with no new E85/E30/E15 “blend” fuel pumps being installed, there is an insufficient supply of E85/E30/E15 “blend” fuel pumps to fuel Flex-Fuel Vehicles, E15 certified vehicles, or intermediate ethanol use vehicles.

Therefore, it seems clear that Section 202 fuel volume criteria (III) and (IV) were not used correctly.

Were Applicable Criteria Ignored?

Within the proposed regulations, EPA did not properly consider two important criteria:

(I) the impact of the production and use of renewable fuels on the environment, including on air quality, climate change, and (II) the impact of renewable fuels on the energy security of the United States.

Climate Change

As EPA as previously determined, cellulosic ethanol (an advanced biofuel) is a major tool in the reduction of motor vehicle Greenhouse Gas (GHG) production. EPA has also determined that corn starch based ethanol reduces GHGs below comparable petroleum based fuels. The US Government has committed to annual GHG reductions, of which E10 makes a significant contribution as part of an international Climate Change agreement.

Therefore, unless the positive Climate Change effects of increased advanced biofuel use are included in the determination of 2104 renewable fuel volume, these proposed EPA regulations appear to have disregarded, and may in fact be contrary to, a significant International Climate Change agreement.

Impact on Energy Security

According to current US DOE/EIA information, the US still imports about one-half of its petroleum supply including that used for transportation fuel. Also of the one-half of the transportation fuel produced in the US, approximately 9.8% is ethanol. So, despite advertisements and media reports about the US being "awash in oil," US domestic oil production contributes only about 40% to every gallon used in motor vehicles. As for the future, even with the rapid exploitation of "tight" oil reservoirs US oil production will not have a sustainable petroleum supply much above (+5-7%) current levels.

With advanced biofuels offering sustainable production, they should be playing a prominent role in US Energy Security Policy. The US Navy recognizes this importance through their Great Green Fleet program. Beginning this year, the US Navy has begun to order HRJ-5 bio-jetfuel and HRF-76 renewable diesel fuel. There demand will reach 336 million gallons/year by 2020. US Navy Secretary Mabus has ordered this program because of the very high national security importance of Climate Change and biofuel production.

Therefore, given that the US still relies on importing a large percentage of its oil and the high national security importance given to mitigating Climate Change and lowering petroleum imports, EPA has ignored a key Section 202 criteria in determining the 2014 renewable fuel volume. By ignoring the full importance of this criteria (II) EPA's proposed 2014 renewable fuel volume also appears contrary to the best national energy security interests of the United States.

Congressional Ethanol Initiatives

EPA has clearly stated in these proposed regulations that additional markets for biofuels above the status quo E10 baseline are needed so that the originally proposed RFS biofuel volume goals can be met.

US EPA has done much to create these markets by proposing and promulgating a number of regulations in response to Congressionally mandated initiatives to increase the use of ethanol. These include: 1) certification of an E85 fuel blend for emission testing, 2) certification of an E15 fuel blend for emission testing, and 3) a Tier 3 proposal (Docket ID No. EPA–HQ–OAR–2011–0135) for a "High Octane/High Ethanol" fuel blend that could result in an E25-E30 fuel that would provide the octane necessary for the small displacement/high efficiency engines needed to meet the upcoming 54 mpg CAFE standards.

It is our understanding of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 that an important key to the implementation of these initiatives was the financial disincentive of RIN credits. Specifically, RIN disincentives were created to encourage oil refiners to make biofuel R&D and infrastructure investments in lieu of having to purchase RIN credits to compensate for the biofuel not marketed.

However, for this system to work a sufficient, but reasonable, annual increase in renewable fuel volume has to be required to create a high enough RIN purchase price that would make biofuel R&D and/or infrastructure expenditures a good investment.

Once such infrastructure investment would be the installation of either E85 or ethanol blend pumps capable of E15, E85, and future mid-grade blends. As pointed out in these proposed regulations, such pumps are rare, even in government fueling stations where government required Flex-Fuel vehicles are fueled and also in comparison to electric recharging stations. In a summer 2012 presentation an Alliance of Automobile Manufacturer representative pointed out that the US government initiative to install electrical recharging stations had resulted in eight times the number of recharging stations than E85 refueling stations. At that time Flex Fuel Vehicles numbered twenty-two times more than electric vehicles, so the density of E85 pumps per vehicle was about 6% that of electric recharging stations. ((1/8)/22 = .006)

The most significant barrier to the installation of these fuel pumps is not technological or even cost. Instead, the major petroleum franchisers; Exxon/Mobil, BP, Shell, Valero, et al, have severely restricted the installation of such pumps in their franchise agreements. The result is very low E85 use by Flex Fuel vehicles, both fleet and privately owned.

Also unfortunately, instead of considering this restriction of trade an impediment to ethanol use that could be positively impacted by a reasonable RIN cost disincentive, EPA has in these proposed regulations as well as earlier ones, accepted this created condition as a valid market definer that would not be subjected to RIN disincentives.

Therefore, not only does this action not try to break the tautology of ethanol supply and demand described above, but by not increasing the renewable fuel volume enough to trigger the RIN disincentive clause to cause improvements in ethanol markets, EPA is not implementing the increased renewable fuel use initiative that Congress passed in the Energy Acts of 2005 and 2007.