Turner, Mason & Company
CONSULTING ENGINEERS

Focus on Fuels

August 2013 Volume 3, Issue 8

In This Issue

Thomas Hogan, P.E.
Sr. Vice President

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

EPA announced the Final Rule on the 2013 renewable fuel standards (RFS) on August 6, 2013. The targets are fairly close to the proposed standards announced in the Notice of Proposed Rulemaking published in the Federal Register on February 7, 2013. The regulations require that the RFS for the coming year be published by November 30th of the prior year, i.e., by November 30, 2012 for the 2013 standards. However, 2013 and 2014 are transition years when meeting the promulgated standards can be relatively difficult if not impossible. Therefore, the EPA delayed publishing the final standards for 2013 to allow public comments. The standards proposed in February and finalized in August are shown below.

2013 Renewable Fuel Standards

	Volume (billion gallons)		Percent of Transportation Fuel	
	2/13 NPRM	8/13 FR	2/13 NPRM	8/13 FR
Cellulosic Biofuel	0.014	0.006	0.008	**0.004**
Biomass Based Diesel	1.28	1.28	1.12	**1.13**
Advanced Biofuel	2.75	2.75	1.60	**1.62**
Renewable Fuel	16.55	16.55	9.63	**9.74**

EPA Finally Finalizes the 2013 Renewable Fuel Standards

by Tom Hogan

Although the obligations, in gallons, for all but cellulosic stayed the same, the percent of the transportation pool increased slightly for all but the cellulosic biofuel. This was due to lower estimates of gasoline

fuels programs.

- Interaction with 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.

and diesel demand in 2013. In addition to setting the 2013 standards, the EPA also extended the date for demonstrating compliance with the 2013 standards from February 28, 2014, to June 30, 2014 and also extended the date RFS attestations are due from May 31, 2014, to September 30, 2014.

The renewable fuel program is becoming a much more visible and controversial program as regulators and industry struggle to live with a program that impacts transportation fuel quality and quantity. There have been many industry and government meetings, hearings and strategy sessions to first understand the current implications of the program and to try to avoid economically crippling consequences in the future.

Future of the Program

The 2013 RFS were required to be issued by the EPA on November 30, 2012. The preamble spoke to the delay and the legality of the delay. The EPA's conclusion was that the delay was indeed in violation of the regulation, but there was no penalty for non performance on meeting the deadline. The preamble also strongly indicated that they do not intend to issue the 2014 RFS by November 30, 2013. It is not a stretch to assume that a delay in setting the annual standards will regularly slip past November 30th for future years.

EPA expects the industry will be able to meet the 2013 obligations, but anticipates that various factors will make compliance with the current 2014 obligations problematic as seen in the comment below from the NPRM preamble.

"As described in the NPRM, we recognize that ethanol will likely continue to predominate in the renewable fuel pool in the near future; and that for 2014, the ability of the market to consume ethanol as E15 - E85 is constrained in a number of ways. We believe that it will be challenging for the market to consume sufficient quantities of ethanol sold in blends greater than E10 and to produce sufficient volumes of non ethanol biofuels (biodiesel, renewable diesel, biogas, etc.) to reach the mandated 18.15 bill gal for 2014. Given these challenges, EPA anticipates that adjustments to the 2014 volume requirements are likely to be necessary based on the projected circumstances for 2014, taking into account the available supply of cellulosic biofuel, the availability of advanced biofuel, the E10 blend wall, and current infrastructure and market-based limitations to the consumption of ethanol in gasoline-ethanol blends above E10."

The initial reaction of the RIN market to the Final Rule was a significant reduction in RIN prices. This market reaction appears to assume that the EPA recognizes the problems and will modify the program in the future to relieve the upward pressure on RIN pricing. In addition, several comments by the press and other interested parties indicate they believe the EPA has signaled that they will reduce the renewable fuel obligation for 2014, and possibly beyond.

With the caveat that no one outside of the EPA (and at this point, probably no one inside the EPA) actually knows what the obligation will be in 2014 and beyond, to assume the preamble statement that the EPA "anticipates adjustments" means the EPA will adjust the obligations to a reasonably achievable goal could be a dangerous

assumption.

There are several reasons to be less than optimistic of an ultimately amicable compromise:

- First, the EPA had the opportunity to soften the corrective action required in 2014 and beyond by reducing the proposed obligation in 2013. Instead, the EPA actually increased the percentage standards in the 8th month of this year compared to the proposed limit, hardly an indication of reductions in future years.
- Second, several articles have noted that the 10% blend wall will be reached in 2014. In fact, the industry already reached the 10% blend wall as seen in the reduction in the RINs carried over from 2012 into 2013 and the expected further reduction in RIN carryover from 2013 to 2014.
- Third, although the expected gasoline and diesel production in 2014 and, therefore, the amount of renewable fuel that can be blended with a 10% blend wall can be reasonably estimated, there was no statement by the EPA of the magnitude of a reduction in the 2014 obligation. There was no indication of a minimum reduction.
- Fourth, the RIN carryover inventory is being reduced every year. It is expected to be about 1 billion RIN gallons at the end of 2013 and be more than completely consumed in 2014. Once that inventory is gone, there is no more flexibility to satisfy RIN obligations in excess of the amount that can be blended into gasoline.
- Finally, if the RIN carryover from 2013 is 1 billion, as we expect, the modification to the 2014 obligation could appear to be huge. Assuming 1.5 billion gallons of biodiesel and 10% ethanol in gasoline and total gasoline of 8.8 million barrels per day, the total renewable fuel obligation that could be met would theoretically be 15.75 billion gallons, plus the inventory carryover or 16.75 billion gallons versus the current 2014 standard of 18.15 billion gallons.

The analysis of any national obligation that is imposed on a number of participants can be misleading in assuming that the system is infinitely flexible, and the required RINs will find the proper home allowing all of the participants to meet their obligation. In the real world, some participants will stockpile 2014 RINs to meet the 2015 obligation. Only about 4 billion 2014 RINs carried over to 2015 would be applicable to the 2015 obligation. Therefore, if the obligated parties choose to build up their inventory to 20% of the 2015 obligation, the 2014 obligation would need to be reduced to 12.75 billion gallons, which is about the same as the 2010 obligation. It is questionable if the EPA would allow such a large adjustment to the obligation. In addition, without significant changes in the current fuel supply system, the annual obligation would be stuck at about 15.75 billion gallons for the foreseeable future.

Finally, all of the previous analysis points to probably the biggest challenge in the RFS program, a lack of certainty. The program was designed to be technology-forcing because it included a requirement to produce and use cellulosic biofuel, a non commercial fuel not produced when the rules were set and still not produced in commercial quantities. The regulations included the requirement that the EPA review biofuel availability each year and set realistic goals. Sounds pretty conciliatory by the EPA, eh? The problem is that the

lead time needed to change the entire supply and demand dynamics in the fuel system is much greater than the regulated time frame of two months (November 30th of prior year) for notice of the next year's obligations. Not to mention that the agency treats the November 30th date as a "suggested" notice date. The odd dynamic that results from this lack of certainty is that the fuels industry must operate on the assumption that the EPA will grant relief if the rules become too economically disruptive as defined by the EPA.

It is a very good sign that the EPA has acknowledged the possibility of limitations in the implementation of the RFS program. However, the refusal to reduce the 2013 obligation and the choice to defer a decision on the 2014 obligation is not a recipe that allows the fuels industry to produce a well-considered plan on how to meet the unknown permutation of the obligation. The final story is far from written, and we expect continuing volatility in the cost of RINs at least until the 2014 obligation is announced.

Turner, Mason & Company
CONSULTING ENGINEERS

2100 Ross Ave, Suite 2920
Dallas, TX 75201
Phone: 214-754-0898
Fax: 214-754-5915
www.turnermason.com