



EPA 2019 RFS Proposed Rulemaking: What You See Is Not What You Get

Jonathan Coppess and Scott Irwin

Department of Agricultural and Consumer Economics
University of Illinois

July 12, 2018

farmdoc daily (8): 128

Recommended citation format: Coppess, J. and S. Irwin. "EPA 2019 RFS Proposed Rulemaking: What You See Is Not What You Get." *farmdoc daily* (8): 128, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 12, 2018.

Permalink: <https://farmdocdaily.illinois.edu/2018/07/epa-2019-rfs-proposed-rulemaking-what-you-see-is-not-what-you-get.html>

On June 26, 2018, the Environmental Protection Agency (EPA) published its proposed rule for establishing the volume obligations under the Renewable Fuels Standard (RFS) (EPA [Proposed Rule](#)). If finalized, the proposed rule would set the requirements for obligated parties to comply with the RFS for calendar year 2019, as well as the requirements for biomass-based diesel for calendar year 2020. On its face, the proposed rule and its obligations appear to be non-controversial and straightforward. Buried within the proposed rule, however, is a mechanism for potentially reducing the mandate below the statutory requirements and EPA's stated obligations.

What You See: General Obligations Proposed for 2019 and 2020

Overall, the proposed rule continues the significant reduction of cellulosic ethanol based on limited production capacity, as well as continuing the increases for biomass-based diesel. Table 1 provides the EPA proposed obligations compared with the statutory requirements.

Renewable Fuels Standard Proposed Renewable Volume Obligations (Billions of Gallons)						
Renewable Fuel	2018 Statutory Requirement	2018 EPA Obligation	Difference from Statutory Requirement	2019 Statutory Requirement	2019 EPA Proposed Obligation	Difference from Statutory Requirement
Cellulosic	7.000	0.288	-6.712	8.500	0.381	-8.119
Biomass-based Diesel [^]	1.000	2.100	1.100	1.000	2.100	1.100
Advanced	11.000	4.290	-6.710	13.000	4.880	-8.120
Conventional*	15.000	15.000	0.000	15.000	15.000	0.000
Total Renewable	26.000	19.290	-6.710	28.000	19.880	-8.120

Notes:
[^]Biomass-based diesel after 2012 is at the discretion of EPA but not less than 1.0 billion
^{*}Conventional (corn starch) renewable fuel is the difference between total and advanced, capped at 15.0 billion

We request all readers, electronic media and others follow our citation guidelines when re-posting articles from farmdoc daily. Guidelines are available [here](#). The farmdoc daily website falls under University of Illinois copyright and intellectual property rights. For a detailed statement, please see the University of Illinois Copyright Information and Policies [here](#).

As EPA explains, it is making full use of the waiver authority granted by Congress in the statute to reduce cellulosic ethanol requirements. This is not controversial and is largely based on EPA projections of the ability of the industry to produce cellulosic ethanol; an estimate of capacity to produce 381 million gallons, which is over 8 billion gallons below the statutory requirements. Similarly, EPA is making full use of its statutory authority to reduce the total renewable fuel volumes by the full amount of the cellulosic reduction. It leaves 4.88 billion gallons of advanced biofuel obligations which are likely to be filled by biomass-based diesel above 2.1 billion gallons.

On its face, the proposed obligations do not appear controversial. EPA has discretionary authority for waiving down the cellulosic mandate, as well as the advanced and total mandates up to the amount of the cellulosic waiver amount. The 2019 proposed obligations appear to align with the statutory mandates. What is not apparent in the numbers, however, is buried in the small print and it involves continued use of hardship exemptions for small refiners.

What You Get: Small Refiner Exemptions Reduce Obligations

Within its explanation, EPA addresses the issue of small refineries and the authority to provide exemptions. In general, the RFS statute provides authority to EPA to exempt small refineries (fewer than 75,000 barrels of average aggregate daily crude oil throughput) from compliance with the RFS mandate; exemption to be based upon an individual finding of a disproportionate economic hardship for the small refinery. The 2010 regulation implementing the RFS established the formula to be used for calculating the yearly percentage standards for obligated parties to comply with the mandate. A key part of the formula is the inclusion of an estimate for the amount of transportation fuel produced by exempted small refineries (*farmdoc daily*, [December 6, 2017](#)). The effect of this is to require EPA to include an estimate of gallons attributable to exempted small refineries thereby shifting the obligations to larger refineries so that the Congressional intent for the RFS mandate would be met. EPA also noted that exemptions not included in the obligation formula and granted after the final rule would not result in a revision to the obligations. The combined result would be an effective reduction in the total renewable fuel obligation based on the amount attributed to small refineries exempted (SREs) after the final rule.

An example will help illustrate how small refinery exemptions effectively reduced RFS obligations in 2017. As the first step, EPA proposed renewable volume obligations for 2017 (RVO). Table 2 shows that the final RVO for conventional (ethanol) was 15 billion gallons, the statutory maximum. The second step was for the EPA to propose percentage standards using the following formula:

$$\% \text{ standard} = 100 \times [RVO / (\text{petroleum gasoline \& diesel use} - \text{SREs})]$$

The formula is simple, the RVO is divided by total petroleum and gasoline use in the lower 49 states net of expected SREs. The EPA calculation for the (implied) conventional % standard in 2017 using this formula was:

$$\% \text{ conventional standard} = 8.32\% = 100 \times [(15\text{bg}) / (180.13\text{bg} - 0)]$$

Based on this formula, obligated parties could simply multiply their production of gasoline and diesel in gallons by the percentage standard to get their individual conventional obligation in gallons. EPA assumed that SREs would be zero when computing the 2017 % *conventional standard* of 8.32%. If SREs turned out to be zero as projected by the EPA and gasoline and diesel use also equaled projections, the actual RVO would have turned out to be exactly 15 billion gallons; the same as originally required in the first step.

SREs had an impact on actual obligated RVOs in 2017 because EPA granted the SREs retroactively after the rulemaking was finalized, and as noted above, it has been EPA policy not to alter percentage standards after rulemakings are finalized. This results in the fixed percentage standards being applied to a smaller total petroleum and gasoline use than was assumed when originally computing the percentage standards. For example, the actual gasoline and diesel use reported by obligated parties to EPA for 2017 was 166.9 billion gallons, 13.23 billion gallons less than the projection in the final rulemaking (EPA, [Annual Compliance Data](#)). While some of the difference could be due to smaller gasoline and diesel use, it is reasonable to assume that the vast majority of the difference reflects the removal of obligated gallons through SREs. In the 2019 proposed obligation rule, notably, EPA acknowledges that 1.46 billion Renewable Identification Numbers (RIN) were carried over because they “were not required to be retired

by small refineries that were granted hardship exemptions for 2017” (Proposed Rule, at 32029). This is consistent with a total reduction in obligated gasoline and diesel use of 13.23 billion gallons.

With the above information we can compute the actual conventional RVO for 2017 as follows:

$$\text{Actual conventional RVO} = 13.887\text{bg} = (8.32\%/100) \times (166.9\text{bg})$$

The end result is that the final 15-billion-gallon conventional mandate was reduced to 13.887 billion gallons in practice through the impact of SREs. This represents not only a large reduction in absolute terms, but crucially, it results in the conventional mandate being well below the E10 blend wall. Similar computations can be used to compute actual RVOs for the other categories of biofuels in Table 2. It is important to note that SREs reduce actual RVOs for all categories of biofuels not just conventional ethanol. The reductions in RVOs for all categories totaled 1.42 billion gallons in 2017.

Renewable Fuels Standard (Billions of Gallons)					
Renewable Fuel	2017 Statutory Requirement	2017 EPA Obligation	2017 Actual Reported Volumes	Difference Reported from Statutory	Difference Reported from Obligation
Cellulosic	5.500	0.311	0.288	-5.212	-0.023
Biomass-based Diesel [^]	1.000	2.000	1.858	0.858	-0.142
Advanced	9.000	4.280	3.973	-5.027	-0.307
Conventional*	15.000	15.000	13.887	-1.113	-1.113
Total Renewable	24.000	19.280	17.860	-6.140	-1.420

Notes:
[^]Biomass-based diesel after 2012 is at discretion of EPA but not less than 1.0 billion; RIN total for 2017 BBD was 2.787 w
*Conventional (corn starch) renewable fuel is difference between total and advanced, capped at 15.0 billion

EPA’s actions with respect to the hardship exemptions for small refineries have been controversial and the proposed 2019 rule is likely to add more (Green, June 16, 2018; Grassley, April 17, 2018). EPA has provided very little information on these small refinery exemptions, including individualized justifications for each exempted refinery. Moreover, EPA in its proposed rule for 2019 states that “at this time no exemptions have been approved for 2019, and therefore we have calculated the percentage standards for 2019 without any adjustment for exempted volumes” despite acknowledging that such exemptions have been granted in recent years (Proposed Rule, at 332057). EPA also states that it “cannot predict how obligated parties will comply in 2018 or the amount of additional small refinery hardship exemptions that may be granted in the future” (Proposed Rule, at 32030). This was the justification for projecting zero SREs for 2019 despite its recent history of awarding large numbers of exemptions. An important implication of this decision is that the RVO associated with expected SREs was not “reallocated” to non-exempt “large” refineries. The above formula for the % standard shows that for each gallon of expected SREs that is subtracted from gasoline and diesel use the RVO of small refineries is effectively moved to large refineries since the % standard for the remaining large refineries increases.

One way to read the 2019 proposed rule for renewable volume obligations, therefore, is to calculate an effective RVO based on an assumption about the level of SREs that will be awarded by the EPA and that the EPA will continue with its present policy of not reallocating SREs. Table 3 provides a comparison for the statutory requirements, EPA proposed obligations and an effective RVO using an expectation for small refinery exemptions in 2019. The effective RVO uses EPA’s calculation but includes an assumption that 15 billion gallons of gasoline and diesel will be exempted through SREs, which is consistent with the level of SREs awarded by the EPA in 2017. Not surprisingly, the impact on expected obligations for 2019 is similar to the previous analysis for 2017. The proposed 15-billion-gallon conventional mandate would be reduced to 13.76 billion gallons, again far below the E10 blend wall, and the reductions in RVOs for all categories would total 1.64 billion gallons. In sum, by not taking into account an estimate for gallons of gasoline attributed to some amount of small refinery exemptions, EPA is leaving open its ability to reduce the mandate; i.e., EPA is taking the opportunity to use the backdoor waiver discussed previously.

Table 3. Estimated Effective RVO					
Renewable Fuels Standard (Billions of Gallons)					
Renewable Fuel	2019 Statutory Mandate	2019 Proposed EPA Obligation	2019 Effective RVO	Difference from Statute	Difference from Obligation
Cellulosic	8.500	0.381	0.350	-8.150	-0.031
Biomass-based Diesel [^]	1.000	2.100	1.920	0.920	-0.180
Advanced	13.000	4.880	4.480	-8.520	-0.400
Conventional*	15.000	15.000	13.760	-1.240	-1.240
Total Renewable	28.000	19.880	18.240	-9.760	-1.640

Notes:
[^]Biomass-based diesel after 2012 is at discretion of EPA but not less than 1.0 billion
*Conventional (corn starch) renewable fuel is difference between total and advanced, capped at 15.0 billion

Not only does the use of the small refinery exemptions without accounting for them in the obligation calculation work to reduce the mandate when exemptions are granted, the retroactive awarding of SREs for 2016 and 2017 results in RINs not being used which can be banked and carried over for obligation requirements in the next calendar year. Banking carryover RINs can provide flexibility to obligated parties for meeting the mandate because banked or carryover RINs can be used for compliance purposes. Importantly, this is limited by the statute which provides that credits are valid for compliance only for 12 months from the date of generation (7 U.S.C. §7545(o)(5)). Notably, EPA acknowledges in the proposed rule that updated reporting by obligated parties indicates an increase in the carryover of RINs from an estimated 2.22 billion to 3.06 billion; an increase in RINs available to meet obligations by 840 million. What may be one area of concern is EPA’s explanation. While pegging the carryover and increase to “market factors, regulatory and enforcement actions, and judicial proceedings,” EPA goes on to clarify that 1.46 billion carryover RINs are due to the small refineries that were granted hardship exemptions for 2017 and another 790 million carryover RINs due to small refinery exemptions for 2016 (Proposed Rule, at 32029). This is effectively 3 billion gallons of the obligation that could be met with carryover RINs rather than actual gallons of renewable fuel.

Still to be Determined: Inadequate Domestic Supply Waiver

In the proposed rule for 2019 obligations, EPA acknowledges the 2017 decision by the D.C. Court of Appeals that thoroughly rejected EPA’s attempt to expand its general waiver authority through an improper interpretation of the phrase “inadequate domestic supply” of renewable fuel (see, *farmdoc daily*, [August 18, 2017](#); *Americans for Clean Energy v. EPA*; [Coppess 2016](#)). The appeals court had rejected EPA’s interpretation, vacating the rule and remanded the rule to EPA for reconsideration in line with the court’s decision. Notably, the vacated rule had sought to establish the obligations for calendar years 2014 through 2016.

EPA does not propose reconsidered obligations for those calendar years (2014 through 2016) in the proposed rule. EPA states that it is “considering a number of issues raised by the need to respond to the court’s remand in a separate process” from the 2019 proposed rule (Proposed Rule, at 32027). EPA does not provide further explanation regarding these issues or what it has concluded needs to be addressed aside from adhering to the court’s decision. EPA acknowledges a need to move “expeditiously” to resolve the issue but informs that it is “not requesting comment on this rulemaking process at this time and any comments on this issue will be treated as outside the scope of this rulemaking” (Proposed Rule, at 32027).

Presumably, the acknowledgement marks the beginning of the end for EPA’s attempts to stretch its general waiver authority but uncertainty remains. The court’s conclusions were clear and leave little room for further creativity by EPA. A relatively long history of administrative problems combined with the recent behavior by, and turmoil within, EPA, however, provide plenty of reason for lingering concerns. EPA needs to follow through and resolve this issue expeditiously and appropriately given that the calendar is moving closer to the 2022 end of the statutory mandates than it is to the years at issue (2014 to 2016).

Implications

On the surface, the proposed rule for 2019 renewable obligations appears to adhere to Congressional intent with the RFS mandate, requiring moderate increases in the use of renewable fuels. Upon closer inspection, however, what the proposed rule appears to provide may not be what the renewable fuels industry receives if this rule becomes final. The biggest issue with this rule involves the small refinery exemptions, which has opened a backdoor mechanism for EPA to reduce the statutory and obligated volumes. For example, the 15-billion-gallon conventional ethanol mandate in the final 2017 rulemaking was reduced to 13.887 billion gallons in practice through the impact of small refinery exemptions. This is not only a large reduction in absolute terms, but crucially, it results in the conventional mandate being well below the E10 blend wall. Use of retroactive small refinery exemptions has also resulted in an increase in carryover RINs available to meet obligations, which might further reduce volumes. Finally, EPA has yet to resolve issues for the 2014 through 2016 calendar year requirements based on the loss in court over its interpretation of its general waiver authority.

References

Americans for Clean Energy v. EPA, 864 F.3d 691 (D.C. Cir. 2017)

Coppess, J. "Upon Further Review: the Decision on EPA's RFS Waiver Authority." *farmdoc daily* (7):151, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 18, 2017.

Coppess, J. 2016. "Three Little Words: EPA and the RFS Waiver Authority." *Choices*. Quarter 1. Available online: <http://www.choicesmagazine.org/choices-magazine/submitted-articles/three-little-words--epa-and-the-rfs-waiver-authority>

Coppess, J. and S. Irwin. "Another Wrinkle in the RFS: The Small RefineryB Exemption." *farmdoc daily* (7):224, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 6, 2017.

Green, M. "Pruitt's New Problem with the GOP: Ethanol," *The Hill*, June 16, 2018. <http://thehill.com/policy/energy-environment/392570-pruitts-new-problem-with-the-gop-ethanol>

U.S. Senator Chuck Grassley, "Bipartisan Group of Senators Request EPA Cease Issuing RFS 'Hardship' Waivers and Disclose Information to Congress," News Releases (April 17, 2018), <https://www.grassley.senate.gov/news/news-releases/bipartisan-group-senators-request-epa-cease-issuing-rfs-hardship-waivers-and>

United States Environmental Protection Agency. "Annual Compliance Data for Obligated Parties and Renewable Fuel Exporters under the Renewable Fuel Standard (RFS) Program." Data current as of June 10, 2018. <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/annual-compliance-data-obligated-parties-and>

United States Environmental Protection Agency. "Proposed Volume Standards for 2019, and the Biomass-Based Diesel Volume for 2020." <https://www.epa.gov/renewable-fuel-standard-program/proposed-volume-standards-2019-and-biomass-based-diesel-volume-2020>