

April 24, 2018

EPA's Own Data Show Small Refiner Exemptions Cut 2016 and 2017 RFS Obligations by at Least 1.6 Billion Gallons

It has been widely [reported](#) in recent weeks that EPA has exempted as many as 25-30 small refineries from their Renewable Fuel Standard (RFS) blending obligations in 2017, and as many as 20 refineries from their 2016 obligations. Despite numerous [requests](#) from industry stakeholders and lawmakers for additional information, EPA has not disclosed the exact number of exemptions granted or, perhaps more importantly, the volume of required renewable fuel blending that was effectively erased by the 2017 and 2016 small refiner exemptions.

However, recently updated [data](#) maintained by EPA itself is shedding new light on the volume of gasoline and diesel fuel that was exempted from blending obligations in 2017. **The EPA data strongly imply that small refiner exemptions have resulted in effectively lowering the 2017 required volume of renewable fuels by 1.11 billion gallons, or 6%. The data also show that small refiner exemptions also effectively reduced the 2016 RFS requirement by 523 million gallons.**

Under the RFS, obligated parties (generally refiners) are required to blend a certain percentage of renewable fuels into gasoline and diesel on an annual basis. The required percentage—known as the Renewable Volume Obligation (RVO)—is determined simply by dividing the volume of required renewable fuels by the volume of gasoline and diesel fuel consumed in the 48 contiguous states and Hawaii. EPA is required to publish the final RVO percentage for a given compliance year in November of the preceding year; thus, the Agency uses short-term projections of gasoline and diesel fuel consumption for the RVO calculation. Notably, gasoline and diesel fuel consumed in Alaska are exempt from RFS obligations, as is diesel fuel consumed in ocean-going vessels (OGVs).¹

Because the RVO is a percentage, the actual required volume of renewable fuel blending may be somewhat higher or lower than the volume specified in EPA's annual RVO final rule. This is because the actual volume of obligated gasoline and diesel consumed may end up being somewhat higher or lower than the level of consumption projected at the time EPA publishes the final rule.²

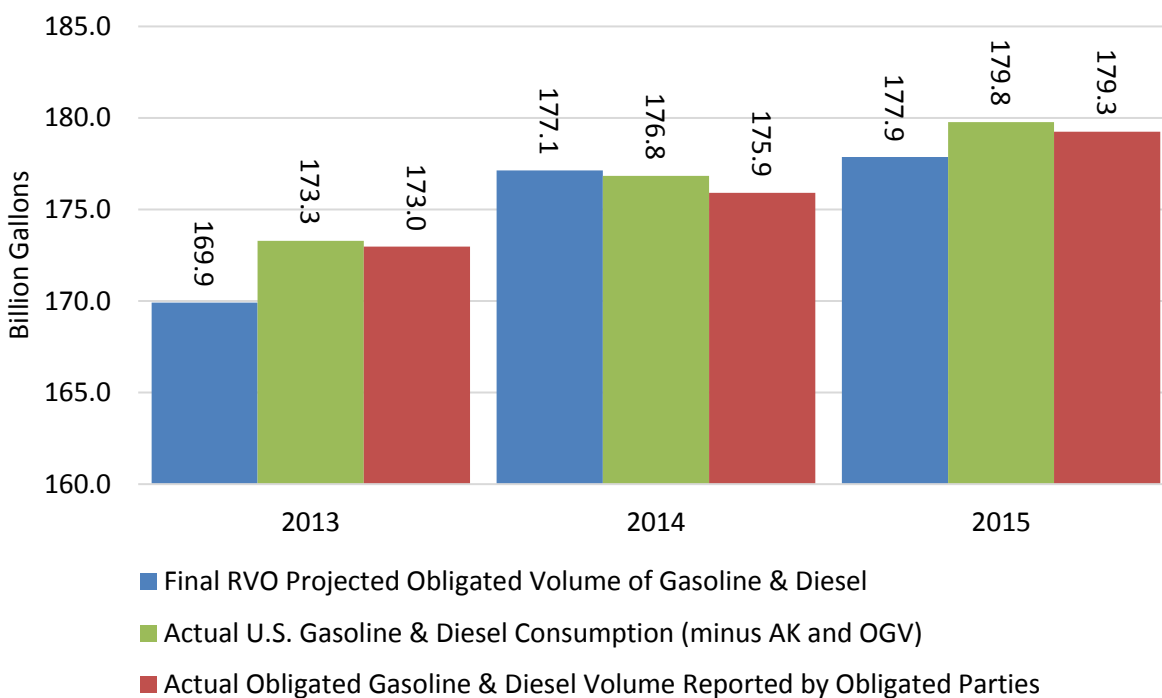
As shown in Figure 1, the actual annual consumption of gasoline and diesel fuel (minus consumption in Alaska and OGVs) in 2013-2015 was very close to the volume of gasoline and diesel fuel obligated for RFS compliance as reported by obligated parties. This means RFS blending obligations applied to virtually every gallon of gasoline and diesel fuel produced and consumed in the United States.

¹ Gasoline and diesel volumes consumed in Alaska and diesel volumes consumed in ocean-going vessels are not included in the total volume of obligated gasoline and diesel used to calculate the RVO percentage.

² For the RVO calculations, EPA uses the latest available Short-term Energy Outlook projections of gasoline and diesel consumption from the Energy Information Administration.

For example, the 2013 total volume of gasoline and diesel obligated for RFS compliance was projected by EPA to be 169.9 billion gallons when the Agency published the final 2013 RVO rule in August 2013.³ However, actual gasoline and diesel consumption (minus Alaska and OGVs) for 2013 was slightly higher than projected, totaling 173.3 billion gallons. Not surprisingly, then, the obligated volume of gasoline and diesel fuel reported by obligated parties was 173.0 billion gallons (again, because the RVO is a percentage that applies to total obligated fuel). The tiny 0.3-billion-gallon discrepancy between actual consumption and the obligated volume reported by obligated parties likely is explained by very modest exemptions for a few small refineries, or possibly by obligated parties electing to carry a small compliance deficit forward as allowed by the regulations.

Figure 1. 2013-2015 Final RVO Volumes; Actual Gasoline and Diesel Consumption; and Volume of Gasoline and Diesel Obligated for Compliance Under the RFS



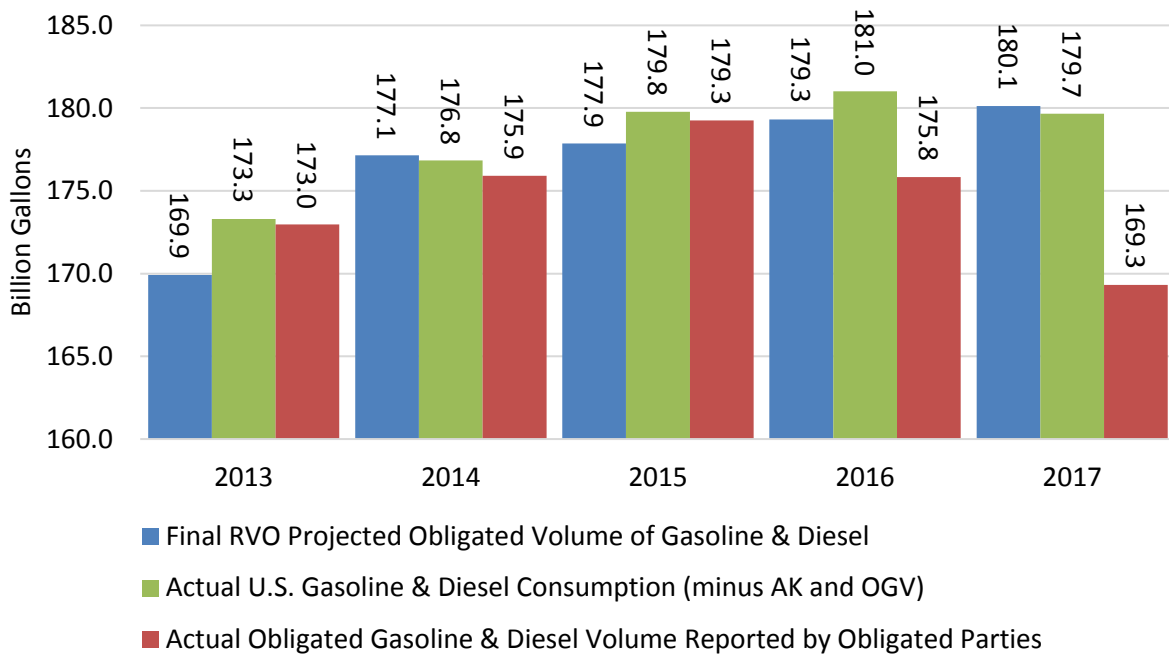
Like 2013, actual gasoline and diesel consumption (minus Alaska and OGVs) in 2014 and 2015 also was very close to the volumes obligated for renewable fuel blending as reported by obligated parties. Again, the minor discrepancies are likely explained by a few modest small refiner exemptions or potentially by deficit carry-forward.

However, as shown in Figure 2, something clearly changed in 2016 and 2017. The EPA data show large discrepancies between actual gasoline and diesel consumption (minus Alaska and OGVs) and the volumes obligated for renewable fuel blending as reported by obligated parties. The difference was 5.2

³ EPA was late in publishing the 2013 final RVO rule, as the statutory deadline for publication of the 2013 RVO rule was Nov. 31, 2012.

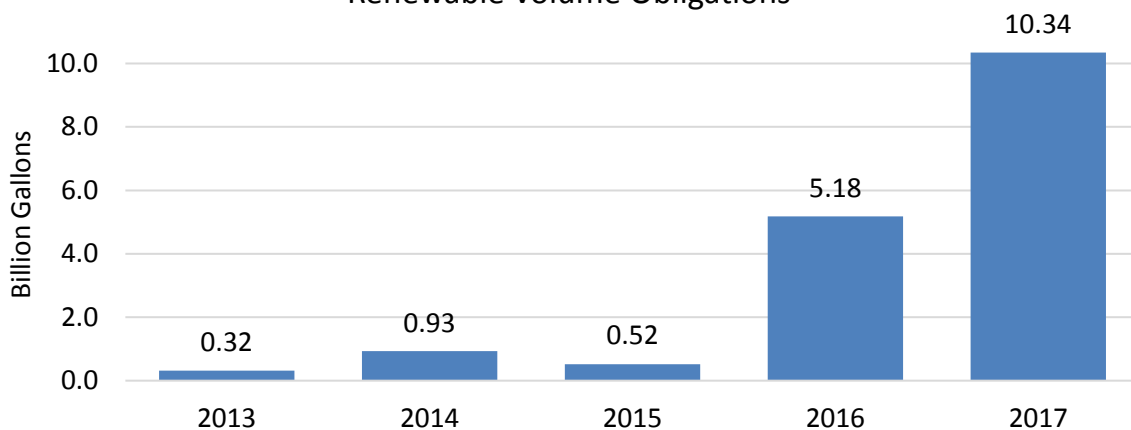
billion gallons in 2016, virtually doubling to 10.3 billion gallons in 2017. The only reasonable explanation for these large discrepancies between actual gasoline/diesel consumption and the volume of gasoline/diesel obligated for renewable fuel blending is the surge in small refiner exemption approvals.

Figure 2. 2013-2017 Final RVO Volume; Actual Gasoline and Diesel Consumption; and Volume of Gasoline and Diesel Obligated for Compliance Under the RFS



As shown in Figure 3, the volume of gasoline and diesel exempted from RFS blending obligations jumped dramatically in the 2016 and 2017 compliance years, compared to previous years. The data strongly support the argument that EPA has recently changed its criteria for granting small refiner exemptions.

Figure 3. Volumes of Gasoline and Diesel Exempted from RFS Renewable Volume Obligations



How does this translate into weakened RFS standards and lost demand for biofuels? As shown in the table below, the de facto reduction in annual RFS standards resulting from small refiner exemptions can be estimated simply by multiplying the RVO percentage by the volume of exempted gasoline and diesel fuel. After effectively reducing the 2013-2015 RFS blending obligations by a combined total of about 165 million gallons, EPA essentially slashed the 2016 RFS volume by 523 million gallons and the 2017 RFS by 1.106 billion gallons. Collectively, the amount of lost blending obligations in 2016-2017 is 10 times the collective lost obligations from 2013-2015.

	Exempted volume of gasoline and diesel (excl. AK and OGVs) (billion gallons)	Total Renewable Fuel RVO %	Amount of reduction in RFS due to small refinery exemptions (billion gals.)
2013	0.32	9.74%	0.03
2014	0.93	9.19%	0.09
2015	0.52	9.52%	0.05
2016	5.18	10.10%	0.52
2017	10.34	10.70%	1.11

These estimates are corroborated by additional EPA data showing the projected renewable fuel volume obligation at the time the final RVO rule was published compared to the volume obligation reported by obligated parties after any exemptions and gasoline/diesel consumption changes are taken into account. The table below shows these figures, in addition to the difference between them. Some of the difference between the projected and reported volume obligations is explained by fluctuations in actual gasoline and diesel consumption compared to projected consumption. However, in many cases in recent years (see 2013 and 2015, for example), that variance leads to the reported obligation being *higher* than the projected obligation. More likely, the large discrepancy between projected and reported obligations in 2016 and 2017 is the generous doling out of small refiner exemptions by EPA.

	Projected Obligation (billion gallons)	Reported Obligation (billion gallons)	Difference (billion gallons)
2013	16.55	16.85	+0.30
2014	16.28	16.17	-0.11
2015	16.93	17.06	+0.13
2016	18.11	17.76	-0.35
2017	19.28	18.12	-1.16

In conclusion, even while EPA has refused to provide the public with information regarding the number and magnitude of its small refiner exemptions, monthly compliance data published by the Agency sheds bright light on the impact of the exemptions. Indeed, the data appear to confirm previous concerns and suspicions raised by stakeholders about the size, scale, and seriousness of the secret small refiner exemptions.

2016 RVO Obligated Gasoline and Diesel Volumes vs. Actual Consumption and Reported Obligations*(All figures in billion gallons)*

	Final RVO Rule	Actual
U.S. Gasoline Consumption (minus AK)	139.96	142.95
U.S. Diesel Consumption (minus AK & OGVs)	55.26	54.67
Sub-total Obligated Gallons	195.22	197.62
<i>Minus</i>		
Renewables in Gasoline (minus AK)	13.85	14.32
Renewable in Diesel (minus AK)	2.05	2.28
Small Refiner Exemptions at time of RVO	0.00	
TOTAL Obligated Gallons	179.32	181.01
Total Obligated Gallons reported by Obligated Parties		175.83
Difference (i.e., Exempted Volume)		5.18

2017 RVO Obligated Gasoline and Diesel Volumes vs. Actual Consumption and Reported Obligations*(All figures in billion gallons)*

	Final RVO Rule	Actual
U.S. Gasoline Consumption (minus AK)	143.61	142.56
U.S. Diesel Consumption (minus AK & OGVs)	53.15	53.69
Sub-total Obligated Gallons	196.76	196.25
<i>Minus</i>		
Renewables in Gasoline (minus AK)	14.35	14.41
Renewable in Diesel (minus AK)	2.28	2.18
Small Refiner Exemptions at time of RVO	0.00	
TOTAL Obligated Gallons	180.13	179.66
Total Obligated Gallons reported by Obligated Parties		169.32
Difference (i.e., Exempted Volume)		10.33