RFS Reforms

EPA Meeting

May 30, 2018

Agenda

1. RFS reform
   - Tab 1: Reform Options Chart
   - Tab 2: Exporting Biofuels White Paper
   - Tab 3: 1 psi Waiver White Paper
   - Tab 4: Small Refinery Exemption White Paper
2. RIN trading
3. RFS transparency
   - Tab 5: Transparency Options Chart
4. RFA lawsuit
5. Other

RFS Reform Options

1. Remove export RIN retirement obligation
2. Extend 1-psi RVP waiver to E15
3. Reallocation of exempt small refinery RVOs
4. 10% blending floor

Please See Tab 1

RFS Reform

- Remove exporter obligation
  - Repeal 40 C.F.R. § 80.1430
  - 1+ billion gallons of renewable fuel exported annually, 600+ million gallons generate RINs that must be retired
  - Potentially more RINs from undenatured ethanol

Please See Tab 2

RFS Reform

- Extend the 1-psi RVP waiver to E15
  - *Substantial litigation risk!*
  - Amend regulations to allow year round sales of E15 with an RVP of 10 psi
  - Could increase the supply of D6 RINs

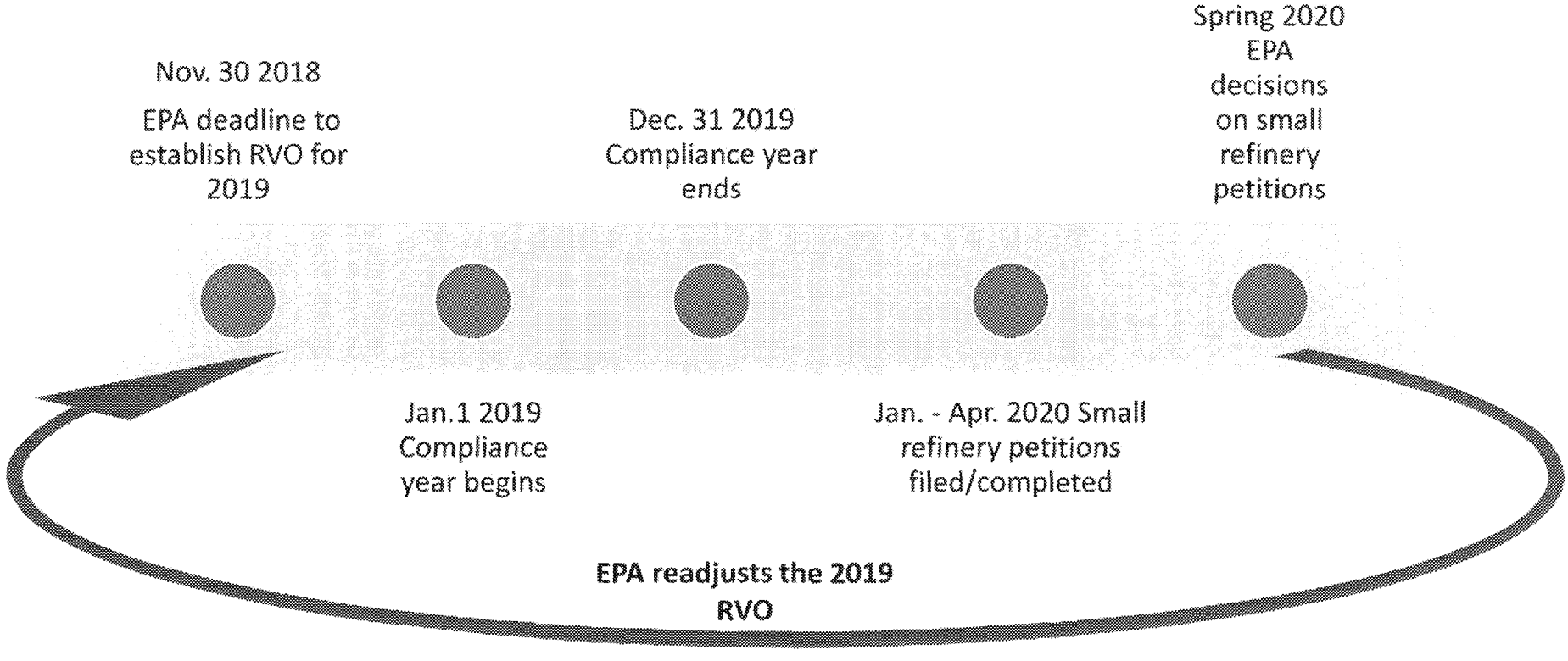
Please See Tab 3

RFS Reform

- Reallocation of small refinery RVOs
  - *Substantial litigation risk!*
  - *Impractical/unfair!*
  - Increase RVO to impose small refinery RVOs on other obligated parties

Please See Tab 4

SRE Volume Reallocation Is Not Practical



Small Refinery Exemption

- EPA should maintain its current approach to the small refinery exemption program

- Hardship exemption provides much needed relief to small refineries

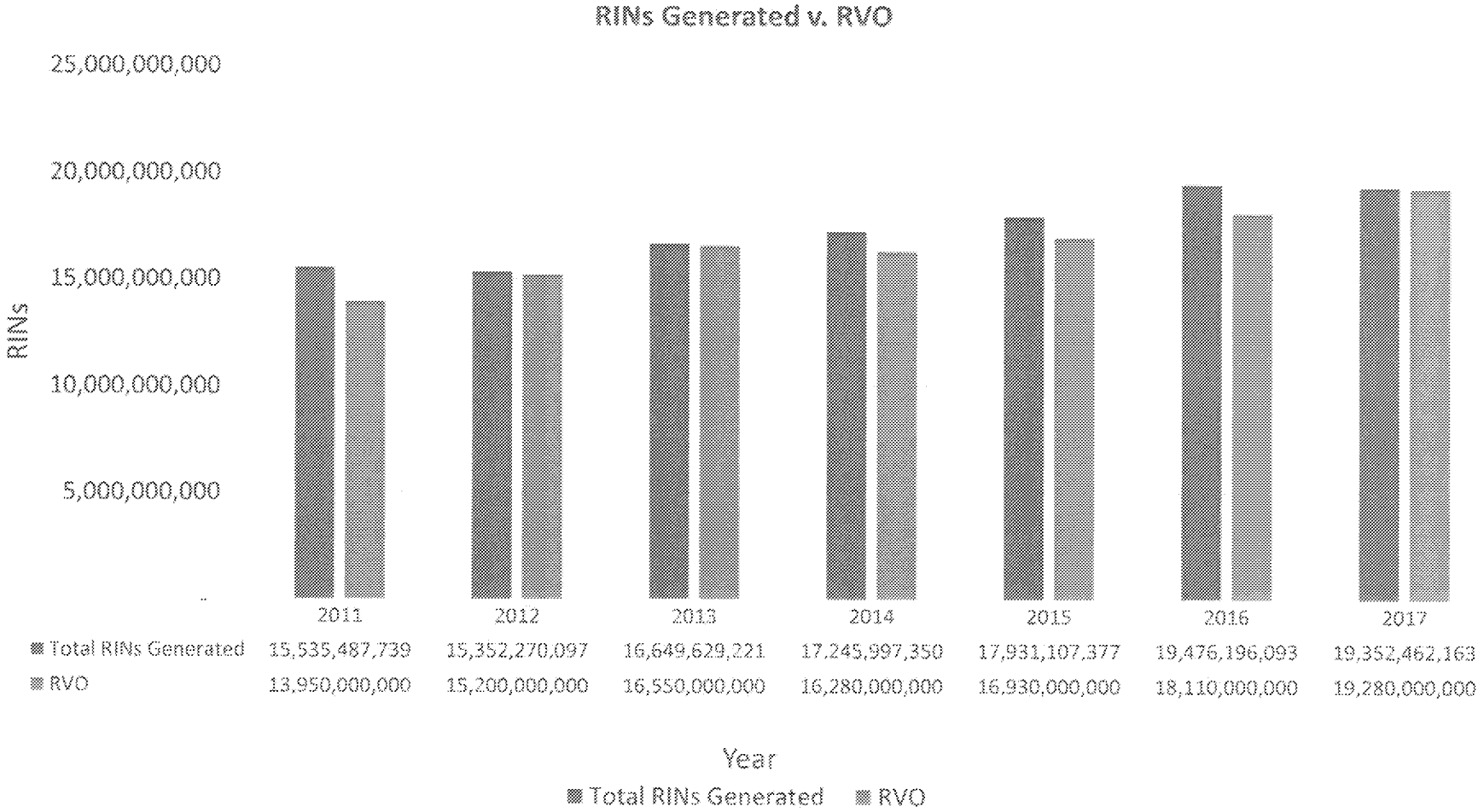
Small Refinery Exemption

- Practical barriers to reallocation of SRE RVOs:
  - EPA sets RVO well before it grants SREs, thus reallocation would need to occur at end of or after close of compliance year
  - Reallocation would impose uncertainty for regulated parties, including small refineries who are on cusp of hardship status
  - Could impose $1 to $2 billion in additional compliance costs on obligated parties

Small Refinery Exemption

- Legal barriers to reallocation of SRE RVOs:
  - EPA cannot increase RVO over that provided in the statute. CAA § 211(o)(B)(i)(I) ("the applicable volume of renewable fuel . . . *shall* be determined in accordance with the following table")
  - Resetting RVO after Nov. 30th of previous year is not permitted by statute. CAA § 211(o)(3)(B)(i)
  - The adjustment provision exists to allow EPA to downwardly adjust RVO, not increase it. CAA § 211(o)(3)(C)(ii); 72 Fed. Reg. 23,900, 23,911 (May 1, 2007).

SREs Do Not Impact Blending Rate



For 2018, renewable fuel production is 102% of 2017 volumes through April.

RFS Reform

- 10% blending floor
  - Impose requirement to blend gasoline to minimum of 10% ethanol
  - Provides certainty to ethanol/corn interests
  - EPA has authority to implement this via regulation

RIN Trading

- Trades via brokers can occur over messenger-type exchanges
  - Intercontinental Exchange ("ICE")

- Largest RIN brokers in the marketplace
  - ICAP
  - SCB
  - Blue Ocean
  - INTL/FC Stone

- Brokers take 1/10 cent per RIN commission on both buyer and seller side

RIN Trading Demonstration

RIN Market Regulation

- The lack of regulatory oversight in the RIN market contributes to high RIN prices
  - RIN trading is not centralized
  - RIN hoarding is prevalent
  - RIN pricing is not transparent

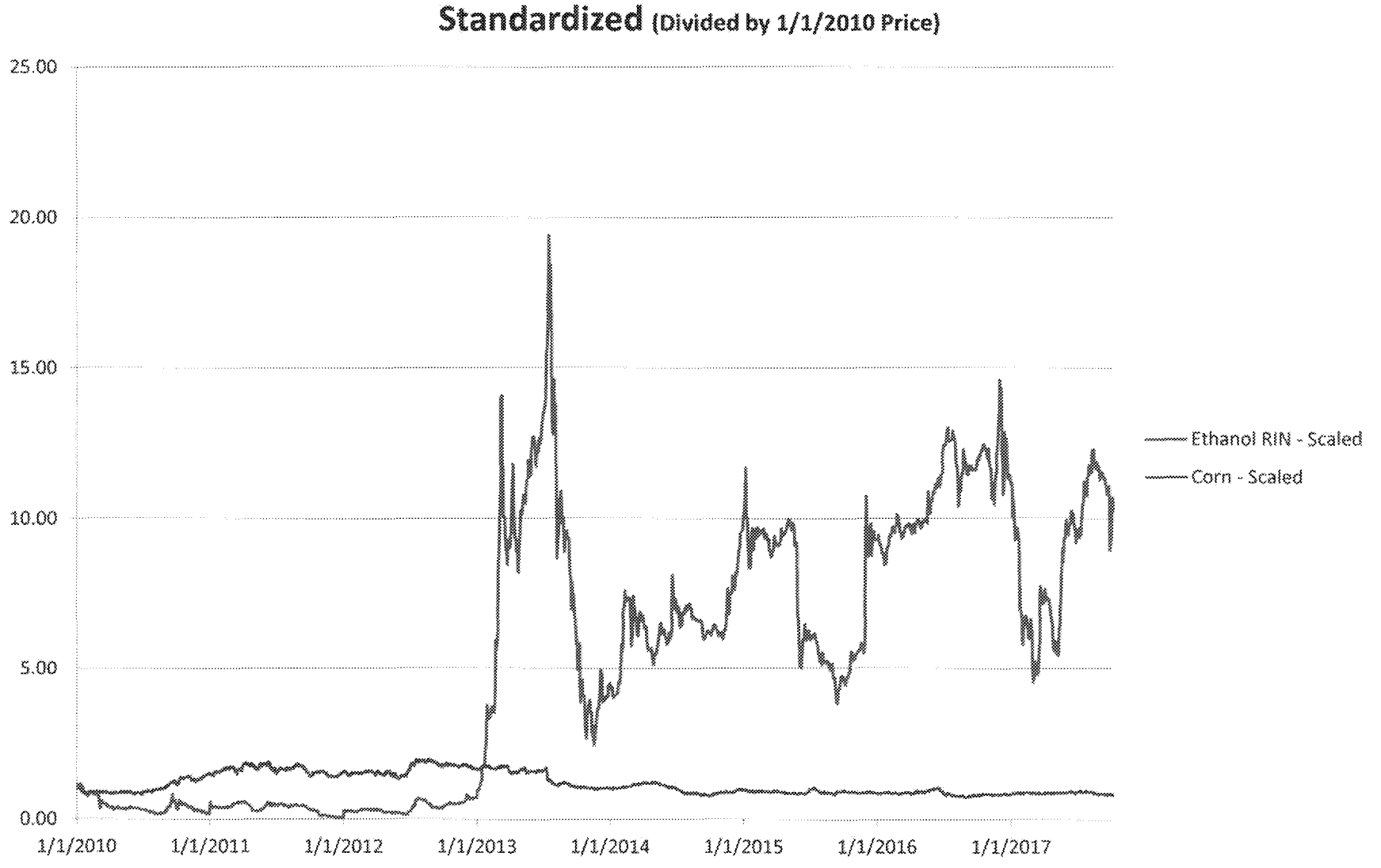
RIN Market Manipulation

- Lack of RIN market regulation leads to market manipulation. For example:
  - Parties may hold RINs to limit supply and put upward pressure on price
  - RIN-long party may purchase RINs if prices begin to fall to stabilize price

RIN Price Volatility

- Ethanol blending is highly profitable because it is 50-70 cents per gallon cheaper – RIN production cost is negative
- RIN prices unrelated to price of ethanol or corn
- RIN prices unrelated to blending costs
  - The cost of blending is an order of magnitude below the cost of RINs
- RIN prices fluctuate significantly based on regulatory and political decisions
- New RIN hedging programs are being introduced; none have succeeded in the past

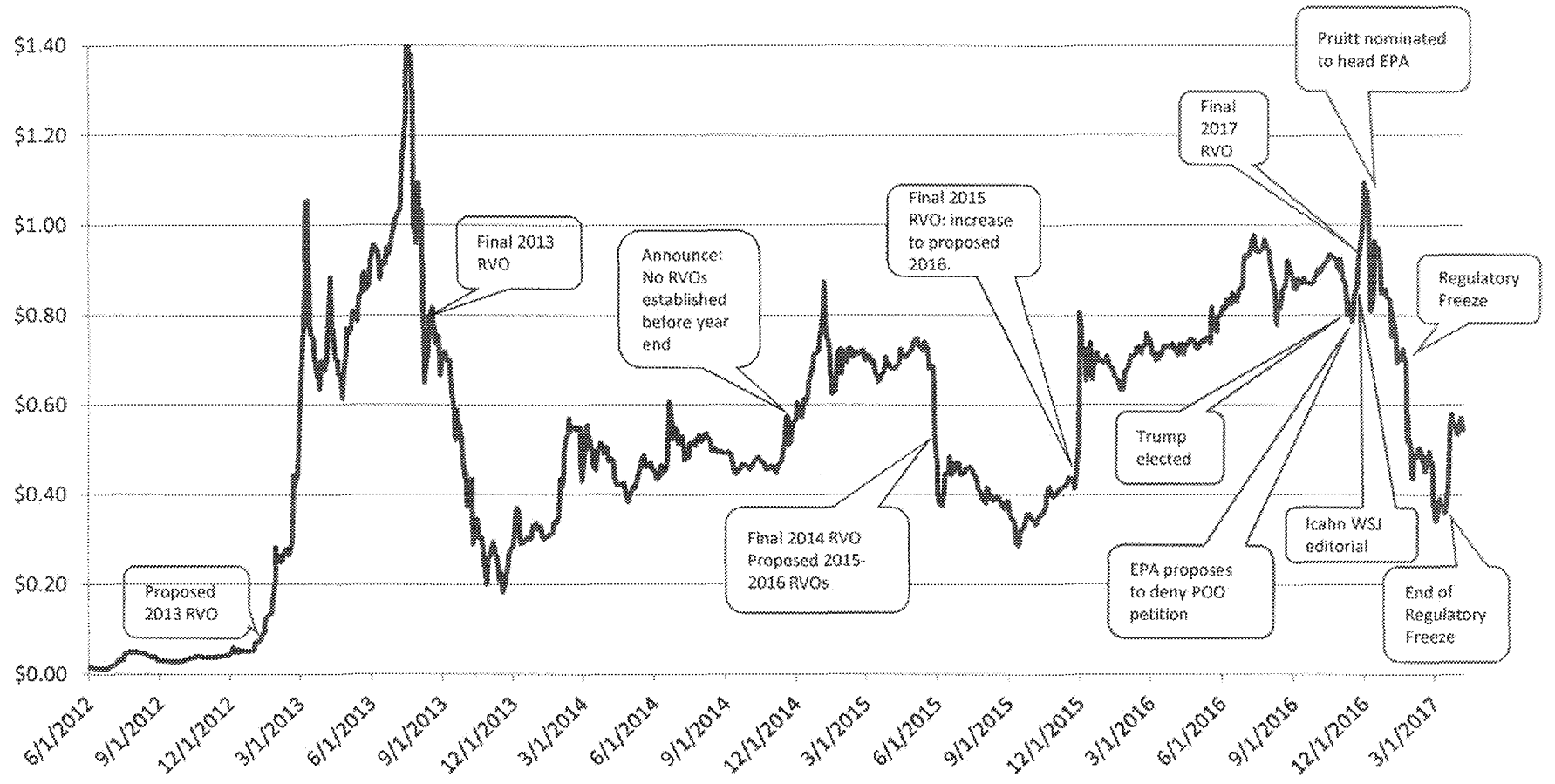
D6 RIN Price vs. Corn Spot Prices



Ethanol, Corn, and Crude Prices

To facilitate comparison, all prices have been divided by 9/1/2009 prices to normalize to 1. A value of 2, for example, means the price was twice as high that day as on 9/1/2009. S(t) = P(t) / P(9/1/2009)

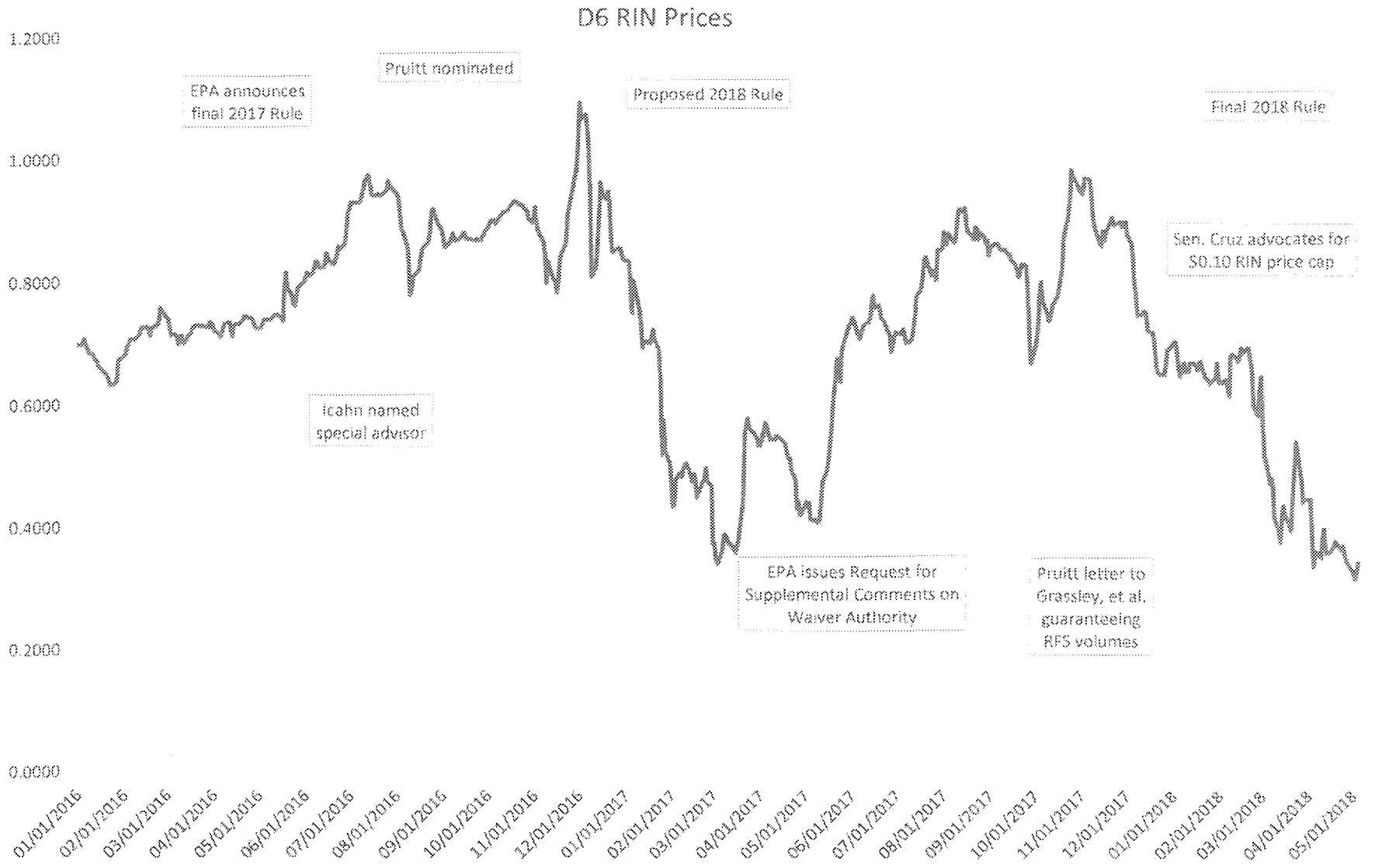
EPA and Political Impacts on RIN Prices



Relevant Dates: EPA Announcements

2/7/13: Proposed 2013 RVO, D6 RINS price *quadruples* the next 4-weeks
8/15/13: Final 2013 RVO, RINS trade down 33% in the next 4-weeks
11/21/14: Statement that 2014 Final Rule will not be set before year-end
5/29/15: Final 2014 RVO and Proposed 2015 & 2016 RVO
11/30/15: Final 2015 RVO, raised 2016 Proposed RVO
5/18/16: Proposed 2017 RVO
8/8/16: Icahn Letter to EPA about RIN market
11/8/16: Trump elected President
11/23/16: Final 2017 RVO
12/8/16: Scott Pruitt nominated to head EPA
1/20/17: Administration Announces Regulatory Freeze
3/20/17: Expiration of Regulatory Freeze

EPA/Political Impacts in the Last 2 Years



Transparency Ideas

1. Anti-hoarding provision
2. Trade restrictions
3. Purchase restrictions
4. Price and volume transparency

Please See Tab 5

Transparency Ideas

- Anti-hoarding provision
  - Non-obligated parties must sell all separated RINs acquired during a calendar quarter in the following quarter.
  - Obligated parties cannot hold more RINs than 120% of their obligation at the end of a calendar quarter.
  - Keeps the RIN moving from producer to obligated party

Transparency Ideas

- Trading restriction
  - Two-trade limit per RIN
  - Similar to sulfur and benzene credit trading restrictions

Transparency Ideas

- Purchase restriction
  - Only obligated parties can purchase separated RINs

Transparency Ideas

- Price and volume transparency
  - Require parties to report the actual purchase/sale price and corresponding volume of a RIN transaction in EMTS (price should be a "matching criteria")
  - Prices should be subject to attestation like all other criteria of the transaction

SRE Litigation

- RFA and others are suing EPA over grant of HollyFrontier's Cheyenne and Woods Cross refineries, and CVR Energy's Wynnewood refinery
- ABFA brought suit in DC Circuit challenging SRE policy
- Industry intervention in pending lawsuits

Other Issues

Reset Provision

- CAA § 211(o)(7)(F) – Requires EPA to modify statutory volumes if:
  - (1) at least 20% of statutory volume waived in 2 consecutive years or,
  - (2) 50% of statutory volume waived in one year
- Each category likely subject to reset at the end of this year

RFS Reset Triggered

Volume Requirement	Cellulosic Biofuel	Advanced Biofuel	Total Renewable Fuel	Biomass-Based Diesel
2014 Statute	1.75	3.75	22.25	> 1.0
2014 Final	0.03	2.67	16.28	1.63
Percent Reduction	98.11%	28.80%	26.83%	
2015 Statute	3.0	5.5	20.5	> 1.0
2015 Final	.123	2.88	16.93	1.73
Percent Reduction	95.90%	47.64%	17.41%	
2016 Statute	4.25	7.25	22.25	> 1.0
2016 Final	.230	3.61	18.14	1.9
Percent Reduction	94.59%	50.21%	18.67%	
2017 Statute	5.5	9.0	24.0	> 1.0
2017 Final	.311	4.28	19.28	2.0
Percent Reduction	94.35%	52.44%	19.67%	
2018 Statute	7.0	11.0	26.0	> 1.0
2018 Final	.288	4.29	19.39	2.1
Percent Reduction	95.89%	61.00%	25.87%	
2019 Statute	8.5	13.0	28.0	> 1.0
2019 Final**	.363	4.88	19.88	2.1
Percent Reduction	95.53%	62.46%	29.00%	

TAB 1

#	Option	Description/Legal Authority
1	**Remove Exporter Obligation**	EPA would rescind 40 C.F.R. § 80.1430 and remove the requirement to retire RINS for exported volumes of renewable fuel. The plain language of the statute requires only that transportation fuel "sold or introduced into commerce in the United States" contain the statutory amounts of renewable fuel. Domestically manufactured renewable fuel is introduced into commerce in the United States before it is exported. This provision is focused on the introduction into commerce of transportation fuel, not the location of where the fuel is consumed. In 42 U.S.C. § 7545(o)(2)(A), Congress explicitly prohibited EPA from restricting the geographic areas in which renewable fuel may be used.

RFS Reform Options

Implementation	RIN Price Impact	Pros/Cons
Administrative solution. EPA would withdraw 40 C.F.R. § 80.1430 and clarify that renewable fuel exporters no longer have an obligation to retire RINs. This is not a complicated process and theoretically, EPA could accomplish the amendment before the end of 2018. To increase the defensibility of the rule, EPA may require that the exporter certify that the ethanol will be used for transportation fuel. Denatured ethanol can only be used for transportation fuel. If EPA amends the definition of ethanol to include denatured and un-denatured ethanol exported for use in transportation fuel, then more renewable fuel would qualify. This rulemaking may be complex and may involve the IRS and state taxing authorities.	Removing the exporter obligation would increase the supply of RINs and put downward pressure on RIN prices. In 2017, EMTS shows 341 million RINs retired for exports.	Increases quantity of RINs and decreases RIN prices. (+) Encourages domestic production. (+) Likely to have farmer support. (+) Decreases enforcement burden. (+) There is litigation risk to the extent the RFS was only intended to address domestic supply or transportation fuel to be solely used in the U.S. (-) Another litigation risk is that the term "transportation fuel" may refer only to blended fuel, in which case only the RINs from blended fuel that is exported could be exempt from the exporter obligation. (-)

#	Option	Description/Legal Authority
2	**Extend the 1-psi RVP waiver to E15**	High litigation risk because it is inconsistent with plain language of Clean Air Act. Amend EPA regulations to permit the sale of E15 with an RVP of 10 psi during the ozone season (summer months). Congress directed EPA to "promulgate regulations making it unlawful for any person during the high ozone season to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch (psi)." Clean Air Act § 211(h)(i), 42 U.S.C. § 7545(h)(1). E10 can have a RVP as high as 10.0 psi. Pursuant to CAA § 211(h), which allows a 1 psi waiver for "fuel blends containing gasoline and 10 percent denatured anhydrous ethanol [which is E10]", EPA granted E10 a waiver that allows for the sale of E10 with a RVP of 10 psi.

RFS Reform Options

Implementation	RIN Price Impact	Pros/Cons
Administrative solution. EPA could amend its regulations to extend the 1 psi waiver to ethanol blends greater than 10%, such as E15. EPA would need to explain in detail the basis for changing its interpretation of the statute because the agency historically interpreted CAA § 211(h) to apply only to E10 and not E15. This change may require a legislative fix, however, because the statute authorizes a 1 psi RVP waiver only for fuel blends containing 10% ethanol. E15 has more than 10% ethanol.	Extending the 1 psi RVP waiver to E15 could increase the supply of D6 RINs. However, sales of E15 in the United States are low and we do not expect a substantial amount of RINs to be introduced into the market as a result of this proposal. The impact on RIN prices from this proposal is expected to be minimal.	High legal risks given plain language of Clean Air Act (-) Minimal change in RIN process (-) Environmental groups will likely oppose given the increase in ground level ozone (-) State air permitting authorities will likely oppose because proposal will make it more difficult for States to show attainment with National Ambient Air Quality Standards for ozone (-) Allows ethanol sales to increase in summer months (+)

#	Option	Description/Legal Authority
3	**Reallocating Small Refinery Exemption Volumes**	EPA would increase the annual RVO to account for the expected granting of Small Refinery Exemptions (SREs) later in the compliance year. There is no legal authority available to EPA to increase the RVO or amend it after the Nov. 30 deadline. The provision in CAA § 211(o)(3)(C) only provides authority to discount the annual RVO to account for exempt small refineries use of renewable fuel. One of the main purposes of the RFS is to ensure that small refineries do not suffer economic harm as a result of the RFS. Congress recognized that small refineries are instrumental to rural America by providing high paying jobs and a substantial tax base. Congress never envisioned that the RINs associated with the Small Refinery Exemptions would be reallocated.

RFS Reform Options

Implementation	RIN Price Impact	Pros/Cons
Administrative solution: EPA may try to address this issue as part of the annual RVO rulemaking procedure. To do so, EPA would need to anticipate the volume of conventional fuel produced by small refineries that are likely to receive SREs. Neither the CAA nor the RFS regulations permit EPA to guess which parties may be exempt, instead EPA must apply the RVO based on the formula set forth in 40 C.F.R. § 80.1405. Additionally, EPA must set the RVO by Nov. 30 of the previous calendar year – it cannot adjust the RVO after that date. Implementation is further complicated by the fact that EPA grants SREs after the end of the compliance year. Thus, this approach is impractical and EPA should not prejudge decisions on SREs. Proposal would be inequitable to other refineries, which in compliance with the RVO throughout the year.	The proposal will likely increase RIN prices by increasing the RVO on obligated parties beyond what is required by the RFS.	Proposal has high legal risk (-) Proposal will increase RIN prices and increase pressure from the blendwall (-) Proposal will not change blending practices and RVO will continue to me met (-)

RFS Reform Options

#	Option	Description/Legal Authority	Implementation	RIN Price Impact	Pros/Cons
4	**E10 and Biodiesel Fuel Specification**	Minimum fuel standard of 10% ethanol in gasoline and [2%] biodiesel in diesel Replaces biofuel ceiling with free market approach Lays foundation for future octane solutions and RFS reforms Solves phantom RIN problem from clear gas sales (E0)	EPA to require a minimum of E10 to be sold in the United States for transportation fuel.	Should not impact RIN prices.	Lays foundation for future octane solutions and RFS reforms (+) Solves phantom RIN problem from clear gas sales (E0) (+) Protects biofuel from loss of current market share (+) Increases biofuel consumption (+) Provides certainty to renewable fuel industry (+)

TAB 2

EXPORTING BIOFUELS UNDER THE RFS

EPA's current regulatory framework addressing exports of biofuels

A renewable fuel producer generates a RIN for each gallon it produces. The RIN remains "connected" to the biofuel until it is blended with gasoline or diesel, or if it is exported. When a RIN is separated from renewable fuel via blending, the blender is free to sell the RIN to another party. When a RIN becomes separated from renewable fuel via export, however, it must be retired and cannot be sold to another party. This restriction exists as a result of EPA's current regulatory framework, which imposes upon an exporter an export renewable volume obligation ("ERVO"). The ERVO prevents the RIN from being used by an obligated party to comply with the annual RVO. *See* 40 CFR §§ 80.1427(c), 80.1430.

Eliminating the EPA-created ERVO is consistent with the RFS statutory language

The RFS does not in any way mandate that EPA impose an ERVO, and one could go as far as saying that the ERVO is illegal. The ERVO appears to be based on EPA's erroneous interpretation of the RFS that only domestically-consumed fuel can satisfy Congress' mandate to increase renewable fuel use. However, EPA's interpretation is inconsistent with the plain language of the RFS. Section 211(o)(2)(A)(i) is the general authority for imposing the annual RVOs and states:

> [RFS1] Not later than 1 year after August 8, 2005, the Administrator shall promulgate regulations to ensure that gasoline sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains the applicable volume of renewable fuel determined in accordance with subparagraph (B). [RFS2] Not later than 1 year after December 19, 2007, the Administrator shall revise the regulations under this paragraph to ensure that transportation fuel sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains at least the applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel, determined in accordance with subparagraph (B) [the Congressionally mandated volumes] . . . .

In RFS1, the annual RVO only applied to *gasoline* sold or introduced into commerce in the United States. In RFS2, however, Congress broadened the statute to apply to *transportation fuel* sold or introduced into commerce in the United States. In RFS1, there could have been a plausible interpretation that only blended fuel (gasoline) could be used to meet the annual RVO. However, in RFS2, that interpretation is no longer viable because transportation fuel must be read to include more than just gasoline. Transportation fuel is defined as "a fuel for use in motor vehicles, motorvehicle engines, nonroad vehicles, or nonroad engines (except for ocean-going vessels)." Section 211(o)(1)(L). Pure ethanol and 100 percent biodiesel can be used as fuel in vehicle engines and are squarely within the definition of transportation fuels.

The second term to consider is "*introduced into commerce in the United States*." This is a term of art in the legal world stemming from the U.S. Constitution and has been defined extremely broad by courts. *See United States v. Potomac Navigation, Inc.* No. WMN–08–717, 2008 WL 11363374 at *2 (D. Md. July 3, 2008). When a product is created domestically and

then transferred to a facility to be exported, the product has been introduced into commerce in the United States. Restricting the definition of the phrase "introduced into commerce" to only the sale of fuel domestically would render it superfluous, as it would have the same meaning as the term "sold."

A broad interpretation of the term "*introduced into commerce in the United States*," also is warranted given the statutory provision prohibiting EPA from restricting the geographical scope of the RFS. Section 211(o)(2)(A)(iii)(II)(aa) states that " [r]egardless of the date of promulgation, the regulations promulgated under clause (i) [the annual RVO rule] . . . shall not restrict geographic areas in which renewable fuel may be used." Once again, the plain language of the RFS program does not restrict biofuels to only domestic use, thus exports should be on equal footing with domestic ethanol.

Impact of Removing ERVO

By rescinding the regulatory requirement to retire RINs for exported renewable fuel, EPA would increase the supply of RINs available in the market. Approximately 1 billion gallons of renewable fuel is exported annually. Not all of this renewable fuel generates RINs, however. Some renewable fuel producers chose not to register their fuel and generate RINs if they know their fuel is destined for export. A portion of this total, approximately 400 million gallons, does generate RINs that are retired upon export. Thus, at least 400 million RINs could enter the marketplace if EPA amends its regulations.

The remaining amount of renewable fuel could also generate RINs if the producers determine it is economical to do so. A portion of this volume is undenatured ethanol. Currently, undenatured ethanol is not eligible to participate in the RFS program, Accordingly, producers will either need to add denaturant to ethanol in order to generate a RIN or EPA will need to work with other agencies, such as the IRS, to amend regulations to permit exports of undenatured ethanol to generate RINs.

Conclusion

We have not found a legal basis to prevent exported biofuels from full participation in the RFS program. In fact, the statutory language could be read to prohibit the current regulatory structure that imposes a separate and independent RVO on exports of biofuels.

TAB 3

EXTENSION OF 1-PSI WAIVER TO E15

This memorandum addresses the Environmental Protection Agency's (EPA) authority to extend the 1-psi Reid vapor pressure (RVP) waiver to gasoline containing 15% ethanol (E15). The plain language of the Clean Air Act and EPA's regulations currently limits the 1-psi RVP waiver to gasoline containing 10% ethanol (E10). Though proponents of increased ethanol use suggest that the Clean Air Act grants EPA authority to extend the RVP waiver to any fuel blend containing at least 10% ethanol, EPA has previously rejected such an interpretation. Accordingly, EPA would face significant litigation risk in adopting a contrary position.

Legal Risk of Extending the 1-psi RVP Waiver to E15

The plain language of the Clean Air Act, which prohibits the extension of the 1-psi RVP waiver to E15, poses the biggest legal obstacle to EPA revising its regulations to extend the a 1-psi waiver for E15.

In the 1990 Clean Air Act amendments, Congress directed EPA to "promulgate regulations making it unlawful for any person during the high ozone season . . . to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch (psi)." Clean Air Act § 211(h)(i), 42 U.S.C. § 7545(h)(1). The statute contains an "ethanol waiver," however, that increases the RVP limit "one pound per square inch (psi) greater than the [9.0 psi] Reid vapor pressure limitation" for "fuel blends containing gasoline and 10 percent denatured anhydrous ethanol." *Id.* § 211(h)(4). Under the statute, parties are "deemed to comply" with the RVP limits if they can demonstrate that "(A) the gasoline portion of the blend complies with the Reid vapor pressure limitations promulgated pursuant to this subsection; (B) *the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4)*; ***and*** (C) no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend." *Id.* § 211(h)(4)(A) – (C)(emphasis added). **Section 211(h)(4) of the Clean Air Act clearly limits the RVP waiver to E10. The proponents of biofuels are seeking for EPA to go beyond this Congressional wavier and allow for E15 during the high ozone season.**

EPA promulgated regulations limiting gasoline RVP during the high ozone season (generally May 1 to September 15) based on the state/region where the gasoline is sold, dispensed, or transported. *See* 40 C.F.R. § 80.27(a). The regulations also contain a waiver provision allowing gasoline containing "denatured, anhydrous ethanol" at a concentration of "at least 9% and no more than 10% (by volume) of the gasoline" to exceed the RVP limits by up to 1 psi. 40 C.F.R. § 80.27(d)(2). EPA's regulatory waiver for "gasohol," or gasoline that contains 9-10% ethanol actually existed before Congress amended Section 211 of the Clean Air Act in 1990. *See* 54 Fed. Reg. 11,868, 11,879 (March 22, 1989). Thus, EPA views the 1-psi RVP waiver provision as a codification of its original regulations.

In 2011, EPA considered extending the waiver to E15 but concluded that it lacked the statutory authority to extend the RVP waiver to gasoline blends greater than 10% ethanol because "the text of section 211(h)(4) and this legislative history supports EPA's interpretation, adopted in the 1991 rulemaking, that the 1 psi waiver only applies to gasoline blends containing 9-10 vol%

ethanol." 76 Fed. Reg. 44,406, 44,433 (July 25, 2011). EPA reached this conclusion primarily because Congress had codified EPA's previous RVP regulations into Clean Air Act § 211(h) as part of the 1990 amendments. *Id.* According to EPA, Congressional intent is apparent on the face of the statutory provision given that Congress specified the waiver applied to fuel blends containing 10% ethanol. *Id.*[1]

EPA could face substantial litigation risk by issuing regulations that extend the 1-psi RVP waiver to E15. As EPA acknowledged, the plain language of section 211(h) likely restricts the 1-psi RVP waiver to fuel blends containing 10% ethanol. While ethanol interests interpret the statute to allow the RVP waiver to apply to any fuel blend containing a minimum floor of 10% ethanol (which E15 satisfies), such an interpretation may not square with the plain language of the statute. As noted above, Congress modeled the RVP waiver on EPA's former regulations, which limited the 1-psi RVP waiver to gasoline blends of 9-10% ethanol. Though Congress had the opportunity to expand the waiver to ethanol blends greater than 10%, it did not do so.

The legislative history of this provision also supports this interpretation. In codifying the RVP waiver, Congress wanted "to facilitate the participation of ethanol in the transportation fuel industry while also limiting gasoline volatility resulting from ethanol blending." 76 Fed. Reg. at 43,434. Congress supported the statutory provision by relying on technical data showing that gasoline blended with 9-10% ethanol results in an approximate 1-psi RVP increase over conventional gasoline. *Id.* Congress did not look at other blends as part of its law making effort. *Id.* This history supports the position that E10 is a ceiling not a floor.

Conclusion

EPA would need to provide a solid basis for revising its interpretation of Clean Air Act § 211(h) to permit the RVP waiver to apply to fuel blends containing more than 10% ethanol. Any such new justification will be legally suspect given the plain language of the Clean Air Act.

[1] EPA also clarified that the "deemed to comply" provision of section 211(h) should not be read to authorize extension of a 1-psi RVP waiver to blends of ethanol above 10%. The agency stated that this provision serves as a defense to liability to those who blend gasoline to achieve a 10% ethanol concentration. 76 Fed. Reg. at 43,434 (stating that the provision "is not written as a free standing RVP limit that acts separate and apart from the 1 psi waiver for 9-10% blends of ethanol").

TAB 4

SMALL REFINERY VOLUME REALLOCATION

The Environmental Protection Agency (EPA) would face significant legal and practical issues if it decides to reallocate the renewable volume obligation (RVO) for small refineries that received an economic hardship waiver to other obligated parties in future Renewable Fuel Standard (RFS) rulemakings. The Clean Air Act (CAA) does not authorize EPA to adjust upwardly the RVO after setting it on November 30 of the previous year. Additionally, reallocation of the RVO in a future year is impractical because it would require obligated parties to blend renewable fuel that would not necessarily exist.

The Small Refinery Exemption

In passing the RFS, Congress acknowledged that small refineries were likely to suffer disproportionate economic harm if required to comply with the renewable fuel blending obligations. To prevent such harm, Congress exempted small refineries from compliance obligations through 2010. CAA § 211(o)(9), 42 U.S.C. § 7545(o)(9); *see Hermes Consol., LLC v. EPA*, 787 F.3d 568, 572 (D.C. Cir. 2015). This exemption provided small refineries time to develop compliance strategies and increase renewable fuel blending capacity. *See Hermes*, 787 F.3d at 572–73. Congress included within the RFS a mechanism to extend the initial small refinery exemption by directing the Department of Energy (DOE) to conduct a study to determine whether RFS compliance "would impose disproportionate economic hardship on small refineries." *See* CAA 211(o)(9)(A)(ii)(I). If the DOE concluded that the RFS would impose a disproportionate economic hardship on small refineries, then the CAA authorized EPA to exempt those small refineries. CAA § 211(o)(9)(A)(ii)(II).

In addition to exempting all small refineries, Congress authorized EPA to extend the exemption for individual small refineries on a case-by-case basis. To avail itself of this option, a small refinery can petition EPA at any time for an extension of its exemption. CAA § 211(o)(9)(B)(i). There are two basic prerequisites for an extension. First, a refinery must be a "small refinery," for any year in which it is seeking an exemption, meaning that it cannot have an average aggregate daily crude throughput greater than 75,000 bpd. Second, the refinery must demonstrate that compliance with the RFS imposes a "disproportionate economic hardship." 40 C.F.R. 80.1441(e)(2)(i).

Currently, EPA grants extensions of the small refinery exemption in 1-year increments. EPA generally issues an exemption decision at the end of the compliance year (December 31), or even after the compliance year because a petitioning refinery must provide financial information for the whole year to substantiate a claim of disproportionate economic hardship. The exemption, therefore, primarily operates retroactively and will result in EPA refunding to the small refinery the RINs it retired for compliance.

Legal Issues with Reallocating Small Refinery RVOs

The CAA prohibits EPA from reallocating volumes from exempt small refineries to other obligated parties either in the existing compliance year or future years.

The RFS requires EPA to convert the statutorily mandated numeric renewable fuel volumes (in gallons) into a percentage standard each year that can be applied equally to all obligated parties to establish each party's RVO. CAA § 211(o)(3). In calculating the percentage standard, the CAA directs EPA to divide the estimated volume of transportation fuel projected to be used in the following year[1] by either the statutorily specified volume of renewable fuel (set forth in CAA § 211(o)(2)(B)) or a lower volume set by EPA following the use of its waiver authority. EPA has until November 30 of the previous calendar year to "determine . . . , with respect to the following calendar year, the renewable fuel obligation that ensures that the requirements [for blending the specified annual renewable fuel volumes] are met." CAA § 211(o)(3)(B)(i).

EPA likely lacks legal authority to increase the RVO in a future year based on the renewable fuel volumes associated with small refineries exempt in the previous compliance year. As indicated above, EPA may not increase the RVO by using a volume of renewable fuel greater than that provided in the statute. *See, e.g.*, CAA § 211(o)(B)(i)(I) ("the applicable volume of renewable fuel for the calendar years 2006 through 2022 *shall* be determined in accordance with the following table" setting forth specific volumes in gallons (emphasis added)). Instead, EPA's authority is limited to downward adjustments based on its waiver authority set forth in CAA § 211(o)(7). Given these restrictions, EPA would be hard-pressed to justify increasing the RVO in a future year in order to reallocate exempt small refinery RVOs from a previous year.

The "adjustment" provision in the statute, which states that EPA "shall make adjustments . . . to account for the use of renewable fuel during the previous calendar year by small refineries that are exempt" likely does not authorize an upward adjustment in the RVO. CAA § 211(o)(3)(C)(ii). Instead, this provision operates as a safety valve to ensure that obligated parties' ability to satisfy their blending obligations would not be prejudiced from exempt small refineries use of renewable fuel, which would reduce the available supply to non-exempt parties. EPA clarified the meaning of this provision in promulgating its interpretative regulations, concluding that accounting for the volume of renewable fuel used by exempt small refineries "would reduce the total volume of renewable fuel use required of others, and thus directionally would reduce the percentage standard." 72 Fed. Reg. 23,900, 23,911 (May 1, 2007).

This interpretation is also logical considering that the concept of RINs did not exist when Congress enacted the statute. In the RFS, Congress directed obligated parties to blend renewable fuel to comply with the statute. If, however, exempt small refineries blended renewable fuel into their transportation fuel, then they would deplete the total volume available to obligated parties for compliance with the RVO. This is so because Congress had not created a credit program that would allow exempt small refineries to sell the credits generated from blending to other obligated parties. Accordingly, Congress permitted EPA to downwardly adjust the RVO to prevent potential compliance obstacles resulting from exempt small refineries using renewable fuel.

EPA also would be unable to adjust the current year RVO based on the granting of small refinery exemptions. As noted above, EPA generally grants exemptions towards the end of or after the compliance year. Thus, EPA would have to adjustment the current-year RVO after the

[1] EPA obtains this projection from the US Energy Information Administration. CAA § 211(o)(3)(A).

November 30 deadline imposed by the statute. There is no provision in the RFS that permits adjusting the RVO after November 30th. Accordingly, EPA would face substantial litigation risk justifying such a decision.

Practical Issues with Reallocating Small Refinery RVOs

Reallocating exempt small refinery RVOs is also impractical and would unfairly burden obligated parties because it would change compliance burdens well into a compliance year.

One of the major obstacles to reallocating exempt small refinery RVOs is the fact that EPA issues exemptions a year or more after issuing the final RVO for the same compliance year. Once EPA sets the RVO, obligated parties develop compliance strategies based upon their anticipated obligation. During the compliance year, obligated parties generally purchase RINs in proportion to their obligation. If EPA were to adjust the RVO at the end of the compliance year to reflect the granting of small refinery exemptions, then obligated parties would have very little time to purchase sufficient RINs to meet their obligation. Moreover, if such an adjustment became common practice, it would induce obligated parties to hoard RINs throughout the year in anticipation of an increased obligation. This would likely lead to high RIN prices and RIN shortages.

Reallocation of the exempt small refinery RVOs also could impose economic hardships on obligated parties. According to EIA data, small refineries are responsible for approximately 10% of domestic refining capacity, and thus would be expected to satisfy approximately 10% of the annual renewable fuel requirements. Using the 2018 RVO, this means small refiners would account for approximately 1.9 billion gallons of the 19.29 billion gallon requirement. If EPA reallocated this volume, then the remaining obligated parties would need to retire approximately 1.9 billion more RINs. Assuming RIN prices fall between $0.50 and $1.00, the burden of shifting an additional 1.9 billion gallons will be somewhere between $1 billion and $2 billion.

Conclusion

Reallocation of hardship volumes impractical and illegal

TAB 5

#	Option	Description/Legal Authority
1	**Anti-RIN Hoarding Provisions**	EPA would require non-obligated parties to sell all separated RINs acquired during a calendar quarter in the following quarter. Additionally, EPA would prohibit obligated parties from holding more RINs than 120% of their obligation at the end of a calendar quarter. The Clean Air Act grants EPA broad authority to establish a credit program. CAA § 211(o)(5).
2	**RIN Trade Restrictions**	EPA would impose a two-trade restriction on RIN transactions. The Clean Air Act grants EPA broad authority to establish a credit program. CAA § 211(o)(5).
3	**RIN Purchase Restrictions**	EPA would allow only obligated parties to purchase separated RINs. The Clean Air Act grants EPA broad authority to establish a credit program. CAA § 211(o)(5).
4	**RIN Price and Volume Transparency**	EPA would require RIN purchases and sale prices to match and be subject to annual attestation. EOA should publish daily RIN trading activity information each day such as (1) volume of separated RINs transacted by vintage and D code and (2) average separated RINs trading price by vintage and D code.

RIN Transparency Reform Options

Implementation	RIN Price Impact	Pros/Cons
Administrative solution. EPA would need to promulgate new regulations and would need to update EMTS to include compliance provisions.	This solution likely would reduce the cost of RINs by discouraging arbitrage opportunities and market manipulation	Likely to reduce RIN prices. (+) Compliance with the anti-hoarding provision would be determined on a quarterly bases, thus reducing the administrative burden on EPA and providing flexibility to RIN market participants. (+) Reduces price speculation (+)
Administrative solution. EPA would promulgate regulations similar to those governing sulfur credit trades.	This solution likely would reduce the cost of RINs by discouraging arbitrage opportunities and market manipulation	Likely to reduce RIN prices. (+) Lowers RIN transactions and administrative costs of RFS program. (+) Reduced RIN liquidity. (-)
Administrative solution. EPA would promulgate regulations similar to those governing sulfur credit trades. This would not impact RIN generators as they transfer assigned RINs with their fuel.	This solution likely would reduce RIN costs because it would prevent non-obligated parties from entering the RIN market to take advantage of arbitrage opportunities or to engage in RIN market speculation	Does not restrict the party that can generate or separate RINs. (+) Would reduce some market manipulation and RIN speculation. (+) Potential to reduce RIN liquidity. (-)
Administrative solution. EPA would promulgate regulations requiring price and volumes of RINs to be reported accurately and be subject to attestation. EPA would modify EMTS data gathering system to publish timely RIN transactional data.	This solution likely would reduce the cost of RINs by discouraging arbitrage opportunities and market manipulation.	Likely to reduce RIN prices. (+) Provides transparency to market participants and reduces manipulation. (+)