Subcommittee on Environment and Climate Change
Hearing on
"Building a 100 Percent Clean Economy: Solutions for Planes, Trains and Everything Beyond Automobiles"
October 23, 2019

Mr. Chet Thompson
President and CEO
American Fuel & Petrochemical Manufacturers

The Honorable John Shimkus (R-IL)

1. Under the Clean Air Act, a "disproportionate economic hardship" is not a defined term and in order to obtain an exemption for a "disproportionate economic hardship," EPA needs to determine, after consultation with other Federal agencies, whether a "disproportionate economic hardship" will occur to a refinery if it must pay for enough renewable identification numbers to attain compliance.

    a. What do you think should be the definition of a "disproportionate economic hardship"?

AFPM does not take positions on the merits of individual small refinery exemption requests. As a general matter, however, the plain text of the statute indicates that an exemption must be granted in instances where complying with the RFS will disproportionately harm a small refinery. That hardship may arise from a variety of factors as DOE's current test recognizes.

    b. Are you concerned that EPA has too much discretion or the Energy Department will use an inappropriate or inconsistent definition from year to year on what constitutes a "disproportionate economic hardship"?

The Clean Air Act is clear that EPA has a non-discretionary duty to grant small refinery exemptions whenever such a disproportionate hardship showing is made. The courts have also provided guidance to EPA that has further clarified its discretion. It would be difficult for Congress to adopt a definition that addresses the myriad factors impacting small refineries and eliminate the need for EPA to exercise some level of discretion.

2. Do you agree with this statement in the Joint Explanatory Statement for the Consolidated Appropriations Act, 2016?

    "the RFS program may impose a disproportionate economic hardship on a small refinery even if the refinery makes enough profit to cover the cost of complying with the program. Small refinery profitability does not justify a disproportionate regulatory burden where Congress has explicitly given EPA authority, in consultation with the Secretary, to reduce or eliminate this burden."

a. Why or why not?

AFPM agrees with the above statement. Profitability does not completely address whether a refinery is experiencing disproportionate economic harm.

3. In 2017 and 2018, EPA lost legal cases involving decisions it made to reject small refinery exemptions. In the 10th Circuit (Sinclair Wyoming v. EPA) and the 4th Circuit (Ergon-West Virginia v. EPA) the courts ruled EPA too narrowly construed what constituted a "disproportionate economic hardship", ignored the financial impact of Renewable Identification Numbers on the refinery, and relied too heavily on a deficient Energy Department economic hardship analysis to deny the exemption application.

    a. How much do you think these two decisions have influenced EPA waiver responses in the last two years, including the recent granting of 31 waiver requests and EPA's waiver policy?

AFPM is not privy to EPA's internal deliberations about individual refinery exemptions so it cannot speculate on the weight EPA officials have given recent decisions.

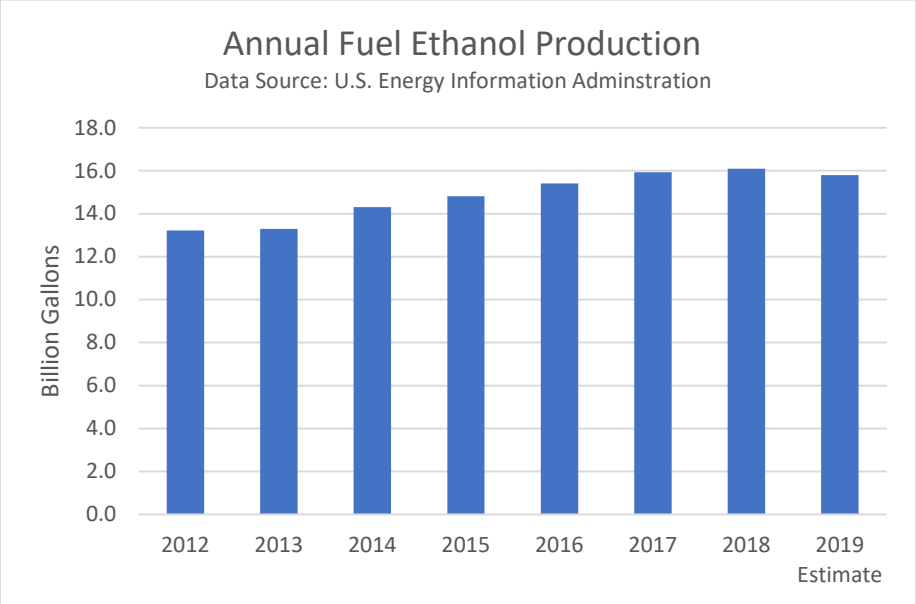
    b. Should Congress create a statutory definition of "disproportionate economic hardship" to avoid continued legal action on this front?

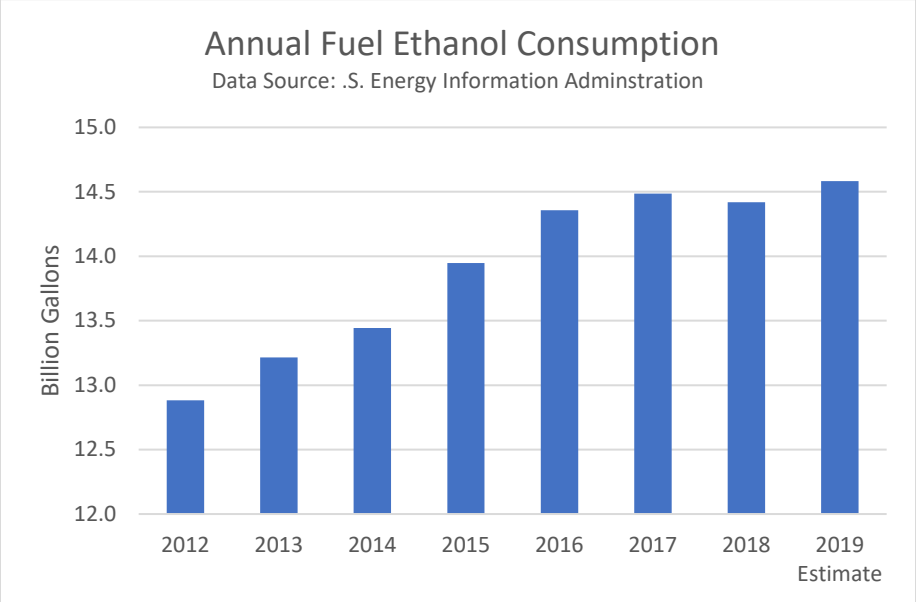
AFPM does not believe further legislative changes to the small refinery program are needed. While creating a more precise definition may increase clarity, it would give rise to further unintended consequences and likely associated litigation. More importantly, it would not address the underlying issues with the RFS that give rise to the need for small refinery exemptions (and broad programmatic waivers) to begin with. Rather, Congress should continue exploring legislative reforms to the program, including transitioning away from RFS volume mandates to a 95-RON octane performance standard.

4. I want to ask you about demand destruction and decreased Renewable Volume Obligations in 2017 and 2018 – decreasing the amount of ethanol being purchased.

    a. Has the actual amount of ethanol being produced decreased at all?

EIA data show that the U.S. ethanol production were record highs in 2017 and 2018, reaching 15.9 and 16.1 billion gallons, respectively. Although the EIA estimates that production may have dipped slightly in 2019, EIA estimates that U.S. consumption reached a record high of 14.6 billion gallons in 2019. We believe that this data demonstrates that the dip in production was largely due to the decline in exports driven by trade policy. The U.S. ethanol industry remains the largest and most efficient biofuels industry in the world.



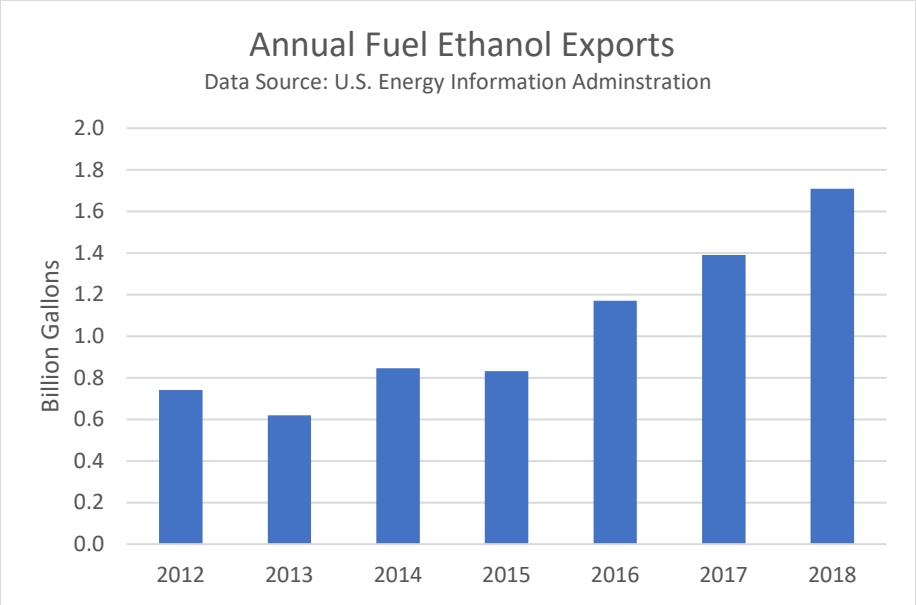


Annual Fuel Ethanol Production	
	Billion gallons
2012	13.2
2013	13.3
2014	14.3
2015	14.8

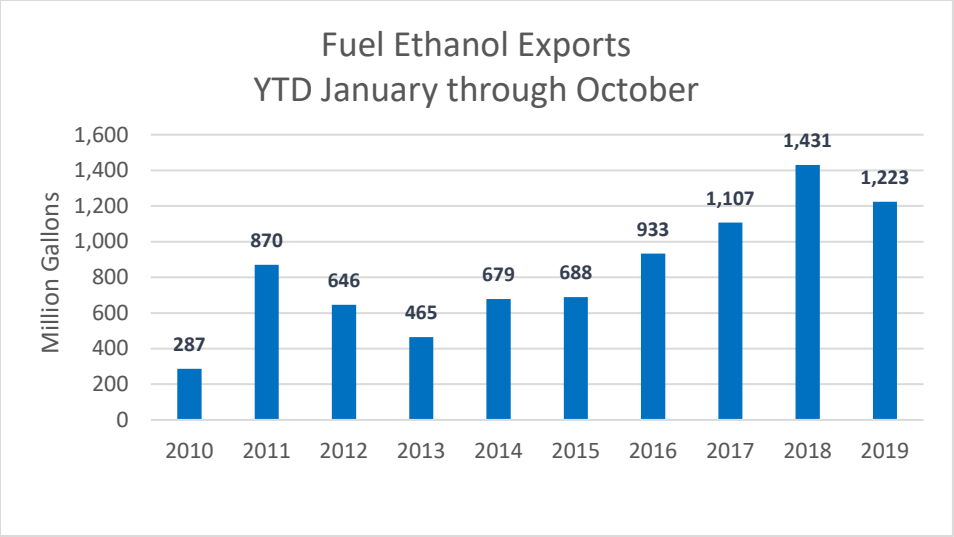
2016	15.4
2017	15.9
2018	16.1
2019	15.8 (estimate)

b. I understand the U.S. has exported record numbers of gallons of ethanol? Is that true? Where is this ethanol going?

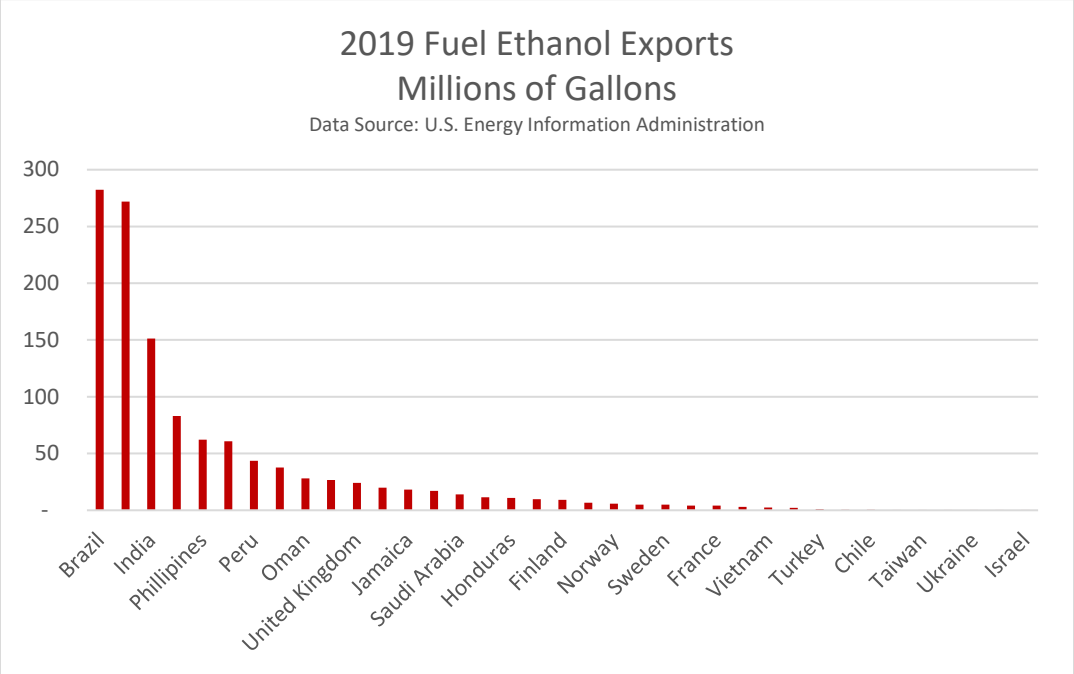
The U.S. has continued to increase ethanol exports for the past decade. The industry exported a record 1.72 billion gallons in 2018, more than double the exports just 3 years earlier and quadruple the volume of exports since 2010.



In 2019, there was a decline in exports, especially to China. In fact, fuel ethanol exports to China stopped after March 2018. Full year fuel ethanol export data for 2019 is not yet available; however, 2019 exports through October were almost 15% lower than 2018.



The following is the list of importing countries and volumes for 2019.



c. Can the blend wall be overcome without additional investments in infrastructure being made?

RESPONSE:

Substantially increasing the volume of ethanol in the gasoline supply would require significant investment and time, including, among other things, refueling infrastructure replacement, and

changes to state fuel regulations. The ethanol blend wall refers to a point at which the domestic gasoline pool contains the maximum amount of ethanol that vehicles and retail infrastructure can accommodate. Generally, the percentage is approximately 10 percent, but the precise number is a function of compatibility between vehicles designed and warrantied to run on blends exceeding 10 percent, the associated retail infrastructure, and consumer choice.

Moreover, E15 is prohibited in California and a handful of other states, representing a significant portion of U.S. gasoline demand. On the vehicle front, only a minority of the vehicles on the road today are compatible with E15, according to the vehicles' owners manuals. These are major obstacles to overcome.

Additional retail investment and auto fleet turnover could increase the proportion of E15 in the market, but it is critical to understand that the EIA also projects declining gasoline consumption in the coming years. In fact, according to the latest Short Term Energy Outlook (January 2020), an E10 baseline will only be 14.1 billion gallons of ethanol in 2021, but EIA projects 14.6 billion gallons of ethanol consumption – a 10.2% blend rate. Therefore, it is increasingly unlikely that the U.S. will meet the 15 billion gallon conventional biofuel target using only ethanol, even with aggressive growth in E15. In spite of EPA's recent authorization of year-round E15 sales in certain vehicles, this fuel blend comprises less than 1 percent of gasoline sales. In fact, to meet the 15 billion gallon conventional target with ethanol, retail stations would need to increase from 1,400 to ~40,000 and E15 market share would need to grow from less than 1 percent to approximately 12 percent of sales. E15 is not the solution to increased domestic ethanol production.

If not, isn't the RFS in need of reform to address this issue at a minimum?

RESPONSE:

The RFS is in critical need of reform for many reasons. AFPM continues to believe that, if done properly, a transition from the RFS to a 95 RON octane standard would be a better policy for consumers, ethanol producers, refiners, automakers, and the environment.

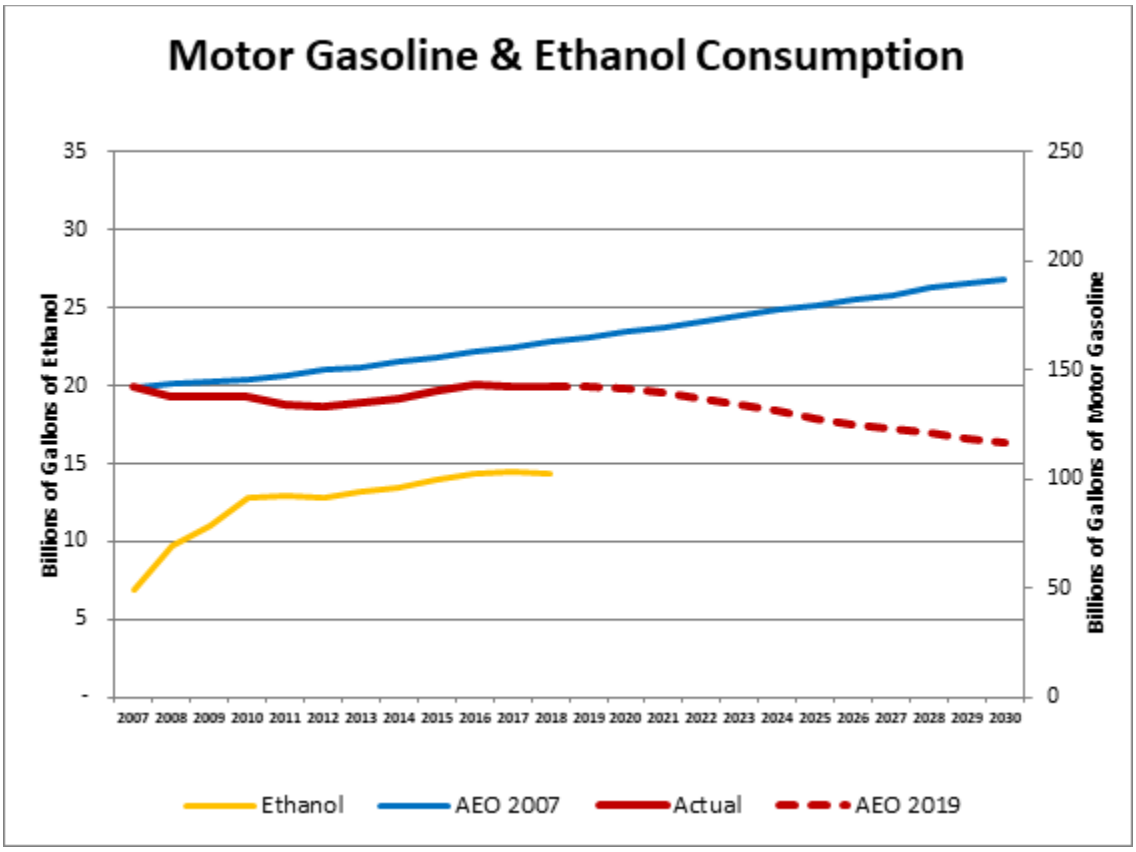
5. What role do the overall markets for your product play regarding the issue of demand destruction?

As stated in AFPM's October 2019 testimony, there has been no demonstrated domestic demand destruction for ethanol resulting from small refinery exemptions. In fact, according to the latest EIA data, which includes data through October 2019, the U.S. consumed a record amount of ethanol in 2019 despite small refinery exemptions. Ethanol remains an economic blending component with a federal mandate, and the U.S. liquid fuels infrastructure has been adapted for E10. AFPM's members primarily produce "blendstocks for oxygenated blending" or "BOBs." These BOBs are formulated for shipment to blending terminals (or "racks") before they are blended with ethanol, many of which are at the end of thousands of miles of common carrier pipelines. The small refinery exemptions reduce compliance obligations, but not physical blending.

Ethanol is a critical product in modern fuels, and demand for the product will largely rise and fall with overall demand for finished gasoline. In this way, markets play a critical role in how much gasoline and ethanol will be consumed. In fact, this is one of the critical factors in making the current RFS volumes unworkable. At the time of enactment of the Energy Independence and Security Act (EISA) gasoline in 2020. In that scenario, the entire 15 billion gallon conventional mandate could be fulfilled with ethanol, at an implied blend rate of 8.9 percent. Instead, the U.S. is now projected to consume only 143 billion gallons of gasoline this year-15 billion gallons of ethanol would imply a blend rate of 10.5 percent- well above the E10 blendwall.

Critically, overall ethanol demand – and thus plant profitability – is also driven by export markets. This is not dissimilar from the refining industry as domestic fuel demand declines. Therefore, market access and trade policy are critical factors in the long-term health of both the refining and biofuel industries.

Gasoline Consumption Forecast Billion Gallons	**2019**	**2020**
AEO 2007	165.2	168.0
AEO 2019	142.9	142.0
STEO January 2020	142.6	142.8
AEO 2019 vs AEO 2007	-22.3	-26.0
% Change	-14%	-15%
STEO vs AEO 2007	-22.6	-25.3
% Change	-14%	-15%



a. If more than the RFS comes into play, why are you only focusing on this issue?

AFPM has long focused on many issues within the RFS and recommended various reforms to improve functioning of the program and to better align the statute with market realities. For example, AFPM testified twice in 2018 recommending that Congress pursue a transition from the RFS to a 95-RON octane performance standard. AFPM has also endorsed legislation that recognizes the E10 blendwall and compels EPA to set advanced biofuel standards based on demonstrated actual production. Small refinery exemptions are only one facet of this complicated program.

6. As I understand it, one way to look at the existing Renewable Volume Obligation proposal is that higher numbers are being proposed, but based on historical exemptions, the expectation is that the number of gallons of renewable fuel produced should work out to guarantee the 15 billion gallons of conventional ethanol normally expected.

    a. RFS required ethanol production has been flat for several years, if the math works out to ensure you are still selling the same amount; what is the concern?

Conventional ethanol has never reached 15 billion gallons consumed in the U.S. In EPA's final rule promulgating the 2020 renewable volume obligations, the Agency finalized its proposal to

prospectively reallocate volumes from small refinery exemptions, using a formula to estimate the average exempted volume using a 3-year average of the DOE recommendations. AFPM strongly opposes EPA's action to reallocate exempted requirements. The fact remains that there has been no demonstrated demand destruction for ethanol as a result of small refinery waivers. Rather because of the aggressive volume targets and blend wall, EPA's final rule will in all likelihood merely force a draw-down the Renewable Identification Number bank and lead to additional volumes of imported biodiesel.

b. In your opinion, is the RFS meant to guarantee a minimum amount of sales of renewable fuel or a minimum level of income from the sales of that fuel?

The RFS sets overall goals for a minimum volume of renewable fuel within the four statutory categories, with various waiver authorities available to EPA to help balance those statutory goals with economic, environmental, and other market realities. In providing several waiver authorities, Congress clearly did not intend for the volumetric targets to be immovable. Rather, they are part of a broader statutory framework that recognized there would be unforeseen challenges and impacts from the program that should be addressed through the waiver provisions. As stated above, policymakers were working from assumptions about gasoline demand that have proven to be wrong. The existence and use of these waiver authorities is more critical now that even anticipated when the EISA was enacted.

7. EPA has claimed that not granting partial waivers is the best way to read the law.

a. Do you agree with this interpretation?

EPA changed its interpretation of this provision in the final 2020 renewable volume obligations rule. AFPM is still evaluating EPA's new interpretation with its membership.

b. What deference should EPA give for waiver consideration to the Explanatory Statement of Managers from the 2016 Consolidated Appropriations Act?

The referenced 2016 appropriations language was not directed towards EPA. Rather, it directed DOE to provide a recommendation for a 50 percent waiver in certain circumstances and reminded DOE that the statutory framework does not allow DOE to only consider profitability. EPA's waiver decision may be informed by DOE's recommendation, but it may not "blindly adopt the conclusions," as the court held in Ergon-W. Va., Inc. v. EPA, 896 F.3d 600 (4th Cir. 2018).

c. What deference should EPA apply from the court cases in 2017 and 2018 on this issue?

EPA should follow the law as interpreted by the courts consistent with their jurisdiction. AFPM is confident that EPA and DOE will apply all relevant court decisions when issuing a decision on small refinery waiver petitions.

d. I understand EPA has conceded this is not the only way to read the law. Is there a better way to read the law and why?

EPA changed its interpretation of this provision in the final 2020 renewable volume obligations rule. AFPM is still evaluating EPA's new interpretation with its membership.

8. A central focus of the hearing this morning concerns the EPA's issuance of the small refinery exemptions (SREs) for the 2018 compliance year. Am I correct that when Congress established the RFS program in 2005 and modified in it 2007, it exempted small refineries through the 2010 compliance year for the standard?

Congress exempted all small refineries through 2010, which was automatically extended through 2012 based on the results of the Department of Energy Small Refinery Study. Beginning in 2013, small refineries were permitted to petition for an extension of those exemptions "at any time."

a. Congress recognized that the RFS program might disproportionately harm small refineries because they lacked the inherent scale advantages of large refineries, is that correct?

Congress recognized there may be many aspects of the RFS that may cause disproportionate economic harm to small refineries. In the DOE Small Refinery Exemption Study (2011), DOE identified the lack of integration with upstream and downstream operations and loss of working capital to purchase RINs, among other factors, as potential factors that may disproportionately harm small refineries. Many of these factors are considered in the DOE matrix when evaluating waiver petitions.

b. And since the automatic exemption in the law expired after 2010, small refineries have had to petition the EPA for exemptions, as required by Congress, correct?

The automatic exemption was extended through 2012 as required under the statute. Small refineries have petitioned for annual relief since the 2013 compliance year.

c. Regarding transparency: When refiners petition for waivers, do they supply confidential business information—the release of which would harm them competitively?

AFPM is not privy to the actual data its members submit to DOE and EPA in their waiver petitions. However, EPA and DOE guidance provide the types of information that need to be included, such as information about facility profitability, margins, and competitive standing within a local market. Such information is and should be treated as confidential business information.

d. Is the current petition process set up to protect this confidential business information? Is that why we don't know the specifics for granting the waivers?

Yes, EPA and DOE have protected individual applications as confidential business information. EPA has taken steps to increase transparency about the number of petitions received, granted and denied, as well as the corresponding aggregated impact on compliance obligations. AFPM supported EPA's decision to increase transparency on an aggregated basis.

e. Is there more information that can be supplied to address transparency concerns?

AFPM believes the steps EPA has taken to increase transparency are sufficient and would oppose efforts to require the disclosure of small refineries' waiver petitions. Disclosure of additional information provides no benefit, would chill companies' desire to seek relief, and if sought would be used to gain commercial leverage.

9. Can you speak to the impacts of price volatility on the RIN prices on refinery operations, especially on smaller refiners and on so-called merchant refiners?

RFS compliance and associated RIN price volatility have a significant impact on refiners of all sizes. Many of our merchant and small refinery members, however, have submitted comments to rulemaking dockets documenting impacts on their businesses. In many instances, the cost of obtaining RINs are among the most significant costs for these refineries, in some instances exceeding all other cost other than crude oil purchases. These costs not only help explain the increase in small refinery waiver petitions, but more fundamentally harm the ability for refineries to invest, create, and sustain quality jobs.

a. How are merchant refiners vulnerable to prices volatility?

RIN price volatility impacts all refiners. The impacts and exposure to RIN market price volatility vary company by company and largely depend on company structure, capitalization, and strategy for procuring RINs.

b. Do the small refinery exemptions help reduce this volatility?

RIN prices are driven by supply and demand, while volatility is driven by uncertainty. If the market expects a higher volume requirement, its stands to reason that RIN prices will increase. Timely issued small refinery exemptions help reduce volatility by increasing the certainty that an increased volume of RINs will be on the market and available for compliance. This liquidity is particularly critical as the volume standards continue to increase year after year and become progressively more expensive and difficult to achieve. Of course, this help is also vitiated if waived volumes are reallocated to non-exempt refineries. Reallocation increases the demand for RINs and further harms obligated parties.

In fact, in 2018 the mandate was set at 19.29 billion RINs while available supply only reached 18.55 billion RINs, which included 700 million gallons of imported biofuel. No small refinery waivers were granted for 2018 until after the compliance year ended. Without the waivers, there would have a been a draw on the RIN bank, reducing liquidity and increasing volatility. For all

the reasons set forth in AFPM's public comments to the 2020 RFS rulemaking, AFPM opposes reallocation of small refinery waivers.

Of course, small refinery waivers are symptomatic of a larger issue and granted on a case-by-case basis. The best course of action would be to transition from the RFS to a 95-RON octane performance standard, assuming it is done correctly.

10. The Subcommittee received a letter from the United Steel Workers, expressing concern about the focus of this hearing and expressing support for the small refinery exemptions as the way to address price volatility. The Steel Workers also noted that Congress must take a longer-term strategic look at the RFS program, in light of changing vehicle efficiencies, the push for expanding electric vehicles, and other market changes. What are your views on that?

AFPM agrees that Congress should take a longer-term strategic look at fuels policies. This is precisely why AFPM continues to support efforts to transition from the RFS to a 95-RON octane performance standard. If done properly, this shift would help increase the efficiency of the internal combustion engine, relieve refineries from the complex and inefficient RFS, and provide a continuing growth opportunity for ethanol, which is a low-cost source of octane.

11. In terms of SRE waiver decisions, what have been the impacts at the price of fuel at the pump, as a result of these waivers?

AFPM is not aware of an analysis estimating the correlation between small refinery waivers and retail gas prices, which are determined by a complex set of factors, most importantly the price of crude oil. However, small refinery waivers are undoubtedly a critical lifeline for small refineries and help maintain a competitive market for fuels.