



October 29, 2019

The Honorable Paul Tonko
Chairman
Subcommittee on Environment
and Climate Change
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable John Shimkus
Ranking Member
Subcommittee on Environment
and Climate Change
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Frank Pallone
Chairman
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Greg Walden
Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Tonko, Chairman Pallone, Ranking Member Shimkus, Ranking Member Walden, and Members of the Subcommittee:

The Biotechnology Innovation Organization (BIO) is pleased to submit a statement for the record to the to the United States House of Representatives Committee on Energy and Commerce Subcommittee on Environment and Climate Change hearing, "Protecting the RFS: The Trump Administration's Abuse of Secret Waivers."

Executive Summary

BIO applauds the Subcommittee for holding today's hearing examining the impact the Administration's expanded use of small refinery exemption (SRE) waivers has had on the advanced and cellulosic biofuels industry.

The Renewable Fuel Standard (RFS) has been a vital tool to BIO's member companies who are leading the development of advanced and cellulosic biofuels. As a market driver providing access to the transportation fuel market, the RFS has spurred research and investment in the development of low-carbon biofuels. The RFS has enabled the United States to become a leader in the development and deployment of new technologies which has led to the growth of the biobased economy, benefitting farmers and commodity producers, helping revitalize rural economies, creating good paying jobs, and fostering energy independence.

Unfortunately, the U.S. Environmental Protection Agency's (EPA) administration of the program has put the investments made by these companies at risk and threatens to prevent growth in advanced and cellulosic biofuels as the RFS intended. This undermines the future economic, environmental, and national security benefits the RFS provides.

Introduction

BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, and industrial and environmental biotechnology products. BIO's Industrial and Environmental Section (IES) represents more than 70 companies leading the development of new technologies for producing conventional and advanced biofuels.

Importance of Policy Support

BIO member companies are developing new agricultural and low-carbon feedstocks, industrial enzymes, and biological catalysts for the conversion of biomass and waste feedstocks into advanced biofuels, alternative jet fuels, renewable chemicals, and biobased products. Utilizing the power of industrial biotechnology, companies across the country are creating a robust biobased economy. Biobased production encompasses a complex value chain, from agriculture through the manufacture of consumer goods, that provides an alternative to the petroleum-based value chain and that brings environmental, economic and other benefits. The biobased economy can generate new markets for agricultural producers, boost innovation in domestic manufacturing, and stimulate sustainable economic growth.

Regulatory Uncertainty

Economic Impact of Small Refinery Exemption Waivers

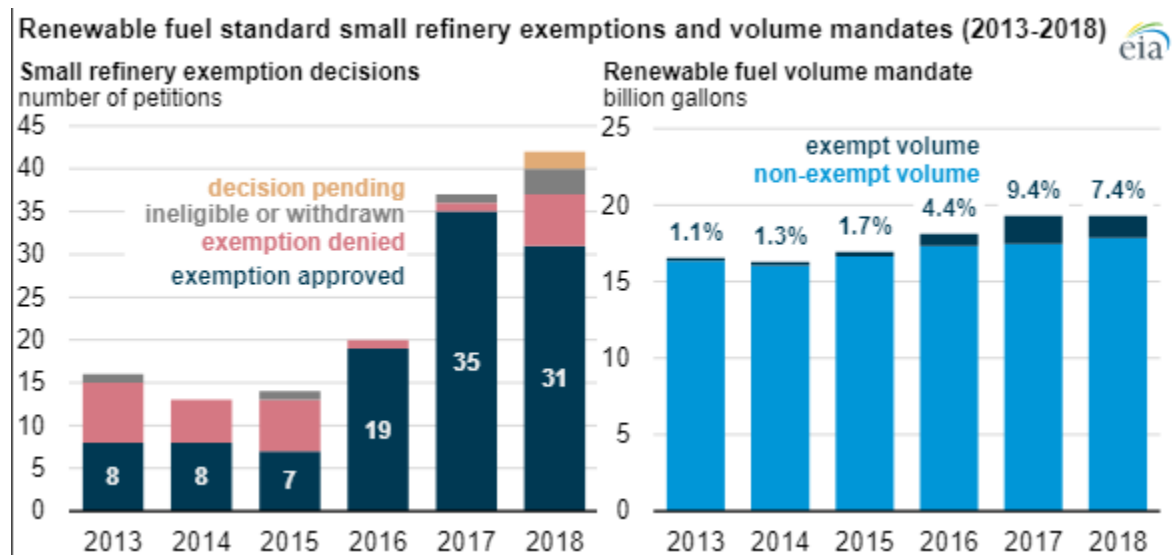
The demand destruction caused by the expanded issuance of small refinery waivers has had a major impact on the biofuels industry. EPA's expansion of granting SRE retroactively after setting the annual percentage standard ensures that the proposed annual volume obligations will not be met with liquid biofuels, contrary to the statute and congressional intent.

From 2013 to 2015, between 13 and 16 SRE petitions were submitted annually, while EPA accepted seven or eight of those petitions. Under former EPA Administrator Scott Pruitt, EPA retroactively granted 19 SREs for the 2016 compliance year. The number of SREs requested and approved markedly increased for the 2017 and 2018 compliance years with 37 requested and 35 approved for 2017 and 42 requested and 31 approved for 2018.¹ The biofuel volumes exempted from these waivers come to over 4.04 billion gallons exempted – 790 million in 2016, 1,820 million in 2017, and 1,430 million in 2018. As a result of these waivers, biofuel consumption declined in 2018 to 14.38 billion gallons from 14.49 billion gallons in 2017, the first year-over-year decline in U.S. biofuel consumption since 1998.² Analysis from the U.S. Energy Information Administration found the

¹ EPA, *Small Refinery Exemptions* (Aug. 5, 2019) Available at <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rfs-small-refinery-exemptions>

² Fatka, J., Feedstuffs. "EPA's RFS waivers cut corn demand by 900m bu." (Mar. 18, 2019). Available at <https://www.feedstuffs.com/news/epas-rfs-waivers-cut-corn-demand-900m-bu>

SRE waivers effectively reduced the amount of biofuel required to enter the nation's fuel supply by exempting 7.4 percent of the total RFS renewable fuel volume mandate for the 2018 compliance year, or about 1.43 billion gallons.³



Source: U.S. Energy Information Administration, based on U.S. Environmental Protection Agency's *Moderated Transaction System* <https://www.eia.gov/todayinenergy/detail.php?id=41794>

This expansion of waivers was not the result of a sudden proliferation of small refineries experiencing economic hardships. Instead the oil industry recognized how exemptions were being treated under the new EPA leadership, many sought to take advantage of the situation.⁴ While EPA will not divulge who has request or received waivers, reports have indicated these waivers have been granted to large companies such as Exxon MobileChevron, Andeavor,⁵ and Carl Icahn's CVR Energy.⁶

These exemptions have come at a cost to the biofuels industry, leading to job loss and stifling investment in innovation. As members of the bipartisan Congressional Biofuels Caucus highlighted in their September 20th letter to EPA Administrator Andrew Wheeler, these waivers are negatively impacting the economy across the country. These Representatives noted that the waivers "have caused three ethanol facilities to closed permanently and another fourteen to idle, affecting nearly 3,000 jobs and hundreds of millions of corn bushels on an annual basis." The impact on the biodiesel industry is even more severe with SREs causing, "nearly \$7.7. billion in economic losses...To date, at least eight biodiesel facilities have shut down this

³ Hanson, S and Hill, S. "EPA refinery exemptions reduced renewable fuel blending requirements in 2018" U.S. Energy Information Administration (Oct. 25, 2019) Available at <https://www.eia.gov/todayinenergy/detail.php?id=41794>

⁴ Nepveux, M. "EPA's Small Refinery Waiver Proposal Is an Unbalanced Approach for Agriculture" Farm Bureau Market Intel (Oct. 21, 2019) Available at: <https://www.fb.org/market-intel/epas-small-refinery-waiver-proposal-is-an-unbalanced-approach-for-agricultu>

⁵ Pamuk, H. and Prentice, C. "Exclusive: Exxon Mobil secured U.S. hardship waiver from biofuels laws – sources" Reuters (Dec. 19, 2018) Available at <https://www.reuters.com/article/us-usa-biofuels-exxon-mobil-exclusive/exclusive-exxon-mobil-secured-u-s-hardship-waiver-from-biofuels-laws-sources-idUSKCN1OI292>

⁶ Renshaw, J and Prentice, C. "Exclusive: U.S. EPA grants biofuels waiver to billionaire Icahn's oil refinery – sources" Reuters (Apr. 30, 2018) Available at <https://www.reuters.com/article/us-usa-biofuels-epa-icahn/exclusive-u-s-epa-grants-biofuels-waiver-to-billionaire-icahns-oil-refinery-sources-idUSKBN1I10YB>

year, which represents 6,800 jobs and 214 million gallons of annual production.”⁷ This is leading to the elimination and consolidation of jobs in rural America which will have a ripple effect throughout the communities they are located.⁸

These waivers also undercut investment and development of advanced and cellulosic biofuels. As the letter noted “these exemptions greatly outweigh the proposed [2020 RFS] rule’s slight 0.12 billion gall increase in advanced biofuel.”⁹ Undercutting demand for advanced and cellulosic biofuels will stifle innovation and drive down the demand for sustainable solutions that reduce greenhouse gas emissions in the transportation sector.

If the RFS were allowed to ensure growth in the advanced and cellulosic biofuels, it would spur the demand for new feedstocks and provide a needed revenue source for agricultural producers. The collection of corn stover for cellulosic biofuels could provide farmers on average an additional \$46 per acre.¹⁰ Greater use of advanced biofuels like butanol, will enable facilities to convert sorghum and corn into a “drop-in” fuel, creating more demand for these commodities.¹¹ Next generation biofuels also have the potential to be a leading driver of sustainable practices in forestry. Residual biomass from forestry operations is one of the most promising potential feedstocks for biofuel production, with the potential to provide over 100 million tons of sustainable feedstock annually.¹² However, investment and development of these technologies will only occur if there is a clear market signal that obligated parties will need to blend biofuels instead of being granted a waiver exempting them from a program.

Environmental Impact of Small Refinery Exemption Waivers

The expanded issuance of SREs is having a negative impact on the environment. Removing biofuels from the transportation fuel market means an increasing dependence on unconventional sources and methods of oil production. Production-related emissions for petroleum from Canadian oil sands is nearly five times that of traditional crude, for example.¹³ A recent NASA analysis suggests leaks of methane

⁷ Peterson, C., Marshall, R. Loebbeck, D., & Davis, R., “Congressional Biofuels Caucus Members Press EPA to Remedy Damage from SRE Waivers” U.S. House of Representatives (Sep. 20, 2019) Available at <https://www.scribd.com/document/427084785/09-20-2019-Final-Letter-to-Epa-2020-Rvos>

⁸ Eller, D., Des Moines Register. “A slap in the face’: Trump’s ethanol waivers are sparking rebellion in farm country.” (Aug. 24, 2019). Available at <https://www.desmoinesregister.com/story/money/agriculture/2019/08/25/donald-trump-ethanol-waivers-iowa-farm-country-lose-support-president-election-voters-farmers/2085033001/>

⁹ Ibid.

¹⁰ POET “Make More Money Per Acre Today.” Available at <http://poet-dsm.com/resources/docs/Make-More-Money.pdf>

¹¹ Environmental Protection Agency, Registration of Isobutanol as a Gasoline Additive, EPA-HQ-OAR-2018-0131, 83 Fed. Reg. 13,460 (proposed March 15, 2018) (to be codified at 40 CFR Part 79), available at <https://www.gpo.gov/fdsys/pkg/FR-2018-03-29/pdf/2018-06119.pdf>

¹² U.S. Department of Energy, Energy Efficiency & Renewable Energy Bioenergy Technologies Office Available at https://www1.eere.energy.gov/bioenergy/pdfs/btu_forest_biomass.pdf

¹³ Union of Concerned Scientists, “Fueling a Clean Transportation Future, Smart Fuel Choices for a Warming World.” (Feb. 9, 2016) Available at <https://www.ucsusa.org/clean-vehicles/clean-fuels/transportation-fuels-future>

from fracking operations may also be contributing more than previously thought to atmospheric greenhouse gas concentrations.¹⁴

While petroleum production is getting more carbon intensive, the RFS incentivizes increasing reductions in greenhouse gas emissions. The RFS requires that conventional ethanol decrease greenhouse gas emissions by 20 percent. However, a U.S. Department of Agriculture (USDA) study found greenhouse gas emissions from corn-based ethanol are about 39 percent lower than gasoline. The study also states that when ethanol is refined at natural gas-powered refineries, the greenhouse gas emissions are even lower, around 43 percent below gasoline.¹⁵

The greenhouse gas emission reductions and benefits will only expand with the utilization of advanced and cellulosic biofuels. The RFS requires lifecycle greenhouse gas emissions reductions of at least 50 percent versus the relevant petroleum-based alternative for a fuel to qualify as an advanced biofuel and 60 percent for cellulosic biofuels. Already advanced and cellulosic biofuel technologies are far surpassing these requirements. As the industry improves its efficiencies and practices, the greenhouse gas reductions of advanced and cellulosic biofuels will be substantially greater than petroleum derived fuels.

However, the production and consumption of these biofuels will only be possible if producers and their investors have confidence that the RFS will give them access to the transportation fuel market by requiring obligated parties to use liquid gallons of biofuels.

Continuation of Uncertainty

Because of the impact these waivers have had on the development of advanced and cellulosic biofuels, BIO, and the agricultural and biofuels industry as a whole, has engaged with the Administration to find a solution to ensure waivers went to refineries truly experiencing a hardship without diminishing volumes for biofuels. Unfortunately, these efforts have yet to yield a solution to bring certainty to the biofuels industry.

Following months of negotiations, the President announced the Administration had reached an agreement on reallocation of gallons lost due to SREs.¹⁶ While the deal was short on details the Administration had provided assurances it would put forward a framework to reallocate the gallons lost to the SREs.

¹⁴ Rasmussen, C. "NASA-led Study Solves a Methane Puzzle" NASA's Earth Science News Team (Jan. 3, 2018) Available at <https://www.nasa.gov/feature/jpl/nasa-led-study-solves-a-methane-puzzle>

¹⁵ Lewandrowski, J., Rosenfeld, J., Pape, D., Hendrickson, T., Jaglo, K., and Moffroid, K. USDA "The greenhouse gas benefits of corn ethanol – assessing recent evidence." (Mar. 25, 2019) Available at <https://www.tandfonline.com/doi/full/10.1080/17597269.2018.1546488>

¹⁶ Eller, D. "Trump unveils new ethanol plan, short on details, that promises to replace exempted gallons." Des Moines Register (Oct. 7, 2019) Available at <https://www.desmoinesregister.com/story/money/agriculture/2019/10/04/trumps-epa-says-plans-replace-gallons-lost-oil-waivers/3850876002/>

Unfortunately, when EPA issued a supplemental notice of proposed rulemaking to the 2020 Renewable Fuel Standard¹⁷ to address the SREs it fell short of this stated promise. Rather than setting the three-year average based off of exempted gallons, the proposal sets the three-year average of exempted volumes based off of the U.S. Department of Energy's (DOE) recommendations. So for example, from 2016 to 2018, EPA waived on average 1.34 billion gallons through SREs. This proposal calls for setting an average of 770 million gallons per year – or about half.

As House lawmakers, led by Representative Rodney Davis (R-IL), noted in a letter to Administrator Wheeler on October 23, 2019 "This announcement does more harm than good for our producers and lends to even greater uncertainty in this challenging farm economy."¹⁸

By using a three-year rolling average based on the recommendations from DOE and not on the actual exemptions will ensure SREs continue to undermine the promise of the RFS to bring low-carbon biofuels to the market. The disconnect on what was promised by the Administration and what was actually proposed was not lost by those who reviewed the supplemental notice in the interagency review process.

As covered by Bloomberg, "documents, uploaded to a government regulatory docket late Monday, show the U.S. Department of Agriculture initially warned the plan was inconsistent with an earlier White House promise to ensure "more than 15 billion gallons" of conventional biofuel, such as ethanol, are required to be blended into the nation's fuel supply beginning in 2020."¹⁹

As the documents²⁰ summarized by DTN showed the White House Office of Management and Budget reviewers called out the supplemental proposal:

Danielle Y. Jones, senior policy adviser for international regulatory cooperation at the OMB wrote in an Oct. 9 email to EPA officials: "We do not agree with the inclusion of the alternative as drafted. We believe there is no rationale for using older data and the alternative is inconsistent with the WH decision last week to ensure that more than 15 billion gallons of conventional ethanol be blended into the nation's fuel supply beginning in 2020."

BIO will continue to work to urge the Administration to revise its proposal during the upcoming comment period on the supplemental. However, given EPA's rejection of the recommendations put forward by OMB and President Trump stating during a

¹⁷ Environmental Protection Agency, Renewable Fuel Standard Program: Standards for 2020 and Biomass-Based Diesel Volume for 2021 and Response to the Remand of the 2015 Standards; Supplemental Notice of Proposed Rulemaking, EPA-HQ-OAR-2019-0136 (Oct. 15, 2019) Available at <https://www.epa.gov/renewable-fuel-standard-program/proposed-volumes-2020-and-biomass-based-diesel-volume-2021>

¹⁸ Neeley, T. "Group of House Republicans Asks Wheeler to Change Biofuels Proposal" DTN Ethanol Blog (Oct. 25, 2019) Available at <https://www.dtnpf.com/agriculture/web/ag/blogs/ethanol-blog/blog-post/2019/10/25/group-house-republicans-asks-wheeler>

¹⁹ Dlouhy, J. "White House Sides With EPA Over USDA Objections on Biofuel" Bloomberg, (Oct. 22, 2019) Available at <https://www.bloomberg.com/news/articles/2019-10-22/white-house-sides-with-epa-over-usda-farmers-in-biofuel-deal>

²⁰ Documentation of OMB Review Under E.O. 12866 RFS 2020 Annual Rule SNPRM Available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2019-0136-0351>

Cabinet meeting on Monday, October 21 that “small refineries are happy,”²¹ uncertainty over the RFS due to SREs will continue.

Delays in Pathways and Facility Registrations

Beyond EPA’s expanded issuance of SREs, delays and uncertainty surrounding the approval of pathways and registration for advanced and cellulosic biofuels are also hindering the development of the industry. As Representatives John Shimkus (R-IL) and Chellie Pingree (D-ME) state in their June 4, 2019 letter to Administrator Wheeler, “delays in review new RFS pathway petitions have inhibited the growth and development of the next generation of innovative transportation fuels.”²²

While significant headway has been made in the past year and there are now only 22 pending pathway applications; many of the recent approvals have been conventional ethanol facilities receiving efficient producer pathways, versus new advanced and cellulosic pathways. Expedient approval of new technology pathways would show both developers and investors that there is a way forward for new biofuel technologies and provide confidence to producers that their technologies will be reviewed in a timely and fair process.

In addition to delays in approving pathways for new technologies, EPA has delayed approving facility registrations for ethanol producers seeking to install technologies to make cellulosic biofuels from corn kernel fiber, which already has a pathway under the RFS. This delay has kept millions of gallons of low-carbon²³ cellulosic biofuels from reaching the market.²⁴

Congressional Oversight

Today’s hearing is critical to the overall efforts to ensure the Administration reigns in the excessive issuance of SREs and ensures that the volumes put forward in the annual RFS are filled with liquid gallons of biofuels. Congress must continue to exercise oversight over EPA to ensure the RFS drives investment in innovative, low-carbon biofuels as the law was intended to.

House Agriculture Committee Chairman Collin Peterson (D-MN) and Representative Dusty Johnson’s (R-SD) legislation, the *Renewable Fuel Standard Integrity Act*, H.R. 3006 could bolster these oversight efforts. This legislation would require refineries seeking an exemption from the RFS to submit petitions in a timely manner so that any waivers granted would be prospectively reallocated to non-

²¹ Hagstrom, J. “Perdue Defends RFS Plan as President Says Small Refiners Are Happy” DTN Ag Policy Blog. (Oct. 23, 2019) Available at <https://www.dtnpf.com/agriculture/web/ag/blogs/ag-policy-blog/blog-post/2019/10/23/perdue-defends-rfs-plan-president>

²² Voegelé, E. “Letter urges EPA to Process Pending RFS Fuel Pathway Applications.” Biomass Magazine (Jun. 11, 2019) Available at <http://biomassmagazine.com/articles/16226/letter-urges-epa-to-process-pending-rfs-fuel-pathway-applications>

²³ California Air Resources Board, Lifecycle Emissions of POET Biorefining (Sep. 10, 2018) Available at https://ww3.arb.ca.gov/fuels/lcfs/fuelpathways/comments/tier2/t2n-1266_report.pdf

²⁴ Heller, M. “Industry faults EPA as Cellulosic Ethanol Production Lags.” Greenwire (Aug. 22, 2018) Available at <https://www.eenews.net/greenwire/2018/08/22/stories/1060094987>

exempt obligated parties. It would also provide greater transparency by ensuring that key information surrounding small refinery exemptions is publicly disclosed.

Beyond legislation, it is critical Congress continues to pressure the Administration and seek information on how it determines what refineries qualify for SREs and to insist that any gallons waived are reallocated to other obligated parties.

The administration needs to uphold the intent of the RFS by providing a solution that encourages investment in clean energy innovation. As long as lost gallons from these exemptions are not fully reallocated, the issuance of SREs continues to harm American farmers and biofuel producers who are already experiencing significant hardship.

Conclusion

BIO's member companies are revolutionizing the fuels sector through the entire value chain of biofuel production with new feedstocks, conversion technologies, and low-carbon sustainable biofuels. To develop and commercialize advanced and cellulosic biofuels in order to decarbonize the transportation fuel sector will require policy certainty. Congress must act to reign in the Administration's expansive issuance of SREs and ensuring that gallons waived for small refineries are reallocated to other obligated parties. This will allow the RFS to function as intended and drive investment and consumption of sustainable biofuels that benefit the environment, job creation, and the economy.