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February 4, 2022

The Honorable Michael S. Regan
Administrator
U.S. Environmental Protection Agency
Docket ID # EPA-HQ-OAR-2021-0324
EPA Docket Center, Air Docket
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator Regan:

The Biotechnology Innovation Organization (BIO) appreciates the opportunity to comment on the U.S. Environmental Protection Agency's (EPA) proposed Renewable Fuel Standard (RFS) Program: RFS Annual Rules (86 Fed. Reg. 72436)¹.

BIO² represents 1,000 members in a biotech ecosystem with a central mission – to advance public policy that supports a wide range of companies and academic research centers that are working to apply biology and technology in the energy, agriculture, manufacturing, and health sectors to improve the lives of people and the health of the planet.

Our members use technology to enhance cultivation and food production and produce sustainable biofuels, renewable chemicals, and biobased products, which provide a cost-competitive alternative to petroleum's value chain that also generates added value through economic development, job creation, and environmental and public health. Companies are utilizing biological processes to convert biomass and waste feedstocks into low-carbon fuels and everyday products. In turn, they create new markets for agricultural crops, crop residues, and waste streams.

Overview

To tackle the climate crisis, it is crucial to lead with science and U.S. innovation. We must incentivize the adoption of innovative and sustainable technologies and practices and streamline and expedite regulatory pathways for breakthrough technology solutions to reduce carbon in hard to abate sectors, like transportation.

Low-carbon fuels produced using biological systems provide a strong and immediate solution to reducing emissions from all forms of transportation, including aviation. Because of biotech innovations, the production of biofuels is becoming more efficient and environmentally sustainable.

¹ <https://www.federalregister.gov/documents/2021/12/21/2021-26839/renewable-fuel-standard-rfs-program-rfs-annual-rules>

² <https://www.bio.org/>



Proposed Volumes

Toward that end, BIO applauds for EPA's proposal for increasing the advanced and cellulosic biofuel volumes and the total renewable fuel volumes as a whole. These increases are critical to driving investment in and deployment of cutting-edge technologies in the low-carbon fuel space.

BIO also thanks the agency for proposing to deny the 65 pending refinery exemptions to waive their obligations under the RFS. Past waivers have undermined certainty in the program and deterred investment, development, and deployment of low-carbon fuels. Hopefully these denials, along with EPA's proposal to create more transparency to the refinery exemption process, will provide more confidence about EPA's volumes.

BIO welcomes EPA's response to address the remand of the 2014-2016 annual rule by the D.C. Circuit Court of Appeals, in *Americans for Clean Energy v. EPA*, 864 F.3d 691 (2017) by proposing a supplemental volume of 250 million gallons in 2022, and an additional supplemental volume of 250 million gallons for 2023.

Despite these overall gains, BIO opposes EPA's proposal to retroactively lower the 2020 RFS volumes. Doing so ignores the fact that the RFS already adjusts to account for reduced fuel demand. Moving forward with a proposal to open finalized RVOs after the fact will only create more uncertainty about the program, stymieing investment and development in future low-carbon technologies.

Biointermediates

BIO welcomes EPA's efforts to craft new regulatory provisions for biointermediates. However, EPA should clarify that a biointermediate producer can also be a renewable fuel producer. EPA also should not limit biointermediates to only the proposed list but should promulgate a petition process for new biointermediates or otherwise allow EPA to recognize new biointermediates without a rulemaking.

BIO is concerned EPA's proposed restrictions on biointermediate transfers and commingling for feedstocks are unnecessary since feedstocks like undenatured ethanol, for example, are already subject to robust and proven regulations under both the RFS and the Department of Treasury's Alcohol and Tobacco Taxation and Trade Bureau (TTB).

BIO urges EPA to consider the opportunities alcohol to jet (ATJ) could benefit the RFS. Either to efficiently utilize and repurpose existing ethanol capacity for aviation; or a streamlined biointermediate provision for ethanol feedstocks that is consistent with EPA's existing regulations, the proven ethanol supply chain under the RFS, and the high integrity of undenatured ethanol feedstocks given TTB's comprehensive regime. By allowing ethanol to aviation we can tackle emissions in a difficult to decarbonize industry and advance the administration's climate and air quality goals. As such, EPA should consider its "renewable fuel as a feedstock" petition authority under 40 CFR 80.1426(c)(6).



Updating RFS Modeling

As EPA prepares its rule to set the RFS RVOs for 2023 and beyond it is critical EPA and the federal government recognize liquid low-carbon fuels provide strong and immediate solution to reducing emissions in transportation and do not require a mass turnover in vehicles. Further, low-carbon liquid fuels will be critical to reducing emissions in hard to abate sectors, like aviation.

The RFS has been crucial to the development of biorefineries and deployment of advanced biofuels as well as investments in infrastructure to help consumers access low-carbon fuels. However, as EPA looks to the future and setting the RFS past 2023, it will be critical for the agency to recognize the production of biofuels is becoming more efficient and environmentally sustainable due to biotech innovations and improved sustainability practices throughout the biofuel supply chain.

Innovative biotechnologies have allowed producers to increase crop yields, improve soil health, and provide biomass and waste feedstocks for sustainable fuels. Unfortunately, EPA's current greenhouse gas modeling for all biofuels does not reflect these improvements. To better recognize carbon reductions available in low-carbon fuels from the field to the fuel tank, EPA should adopt the Argonne National Lab's Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model and updated iLUC modeling. The GREET model is updated annually to reflect technological advances in the U.S. biofuels industry and data on current agriculture production practices to measure the carbon intensity of biofuels more accurately.

By updating its modeling, EPA will help incentivize the adoption of innovative and sustainable technologies and practices and build on the success of the RFS to ensure agriculture and low carbon, sustainable fuels are part of future solutions to significantly reduce emissions in transportation.

Conclusion

Addressing the challenges of climate change will require the rapid development and deployment of biology-based technologies throughout the agricultural supply chain. We urge EPA to advance these technologies and grow the market for low-carbon fuels by finalizing this rule as quickly as possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Gallo".

Sarah Gallo
Vice President, Agriculture and Environment
Biotechnology Innovation Organization