



April 5, 2013

Air and Radiation Docket and Information Center
Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460
via email at: a-and-r-docket@epa.gov

Docket ID No. EPA-HQ-OAR-2012-0546: Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards

The Biotechnology Industry Organization ("BIO") is pleased to comment on the U.S. Environmental Protection Agency's ("EPA") Proposed Rule on the Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards ("the proposed rule").¹

BIO is the world's largest biotechnology organization, with more than 1,100 member companies worldwide. BIO represents leading technology companies in the production of conventional and advanced biofuels and other sustainable solutions to energy and climate change. BIO also represents the leaders in developing new crop technologies for food, feed, fiber, and fuel.

BIO Applauds EPA's Consistency in Methodology for Determining the Cellulosic Biofuel Volume for 2013 Renewable Fuel Standards

EPA's consistent and carefully balanced implementation of the RFS has provided advanced biofuel developers and investors with confidence that if they can produce advanced and cellulosic biofuels, there will be market access for these fuels.² BIO supports EPA's continued recognition that many factors must be taken into consideration

¹ Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 26, 9292 (proposed Feb. 7, 2013) (to be codified at 40 C.F.R. pt. 80) (available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-02-07/pdf/2013-02794.pdf>) [hereinafter *The Proposed Rule*].

² "The value proposition for cellulosic and advanced biofuels under the US federal renewable fuel standard." Ind. Biotech. J. 7(2), April 2011



in developing projections of the proposed Cellulosic Biofuel Volumes for 2013, and that information obtained directly from cellulosic biofuel producers should be evaluated in addition to the U.S. Energy Information Administration's ("EIA") estimate.³ To ensure the maximum possible reliability of future year projections, and to comply with the ruling of the U.S. Court of Appeals for the D.C. Circuit in *API v. EPA*, No. 12-1139, slip op. at 5-10 (D.C. Cir. January 25, 2013),⁴ EPA must maintain the ability to interpret and implement cellulosic volumes based on the best available information. EPA's methodology – including input from producers – is likely to produce the most accurate projection, as companies have now constructed and are commissioning first-of-a-kind commercial-scale cellulosic biofuel production facilities. Construction and commissioning of these first commercial cellulosic biorefineries has provided valuable experience and insight into the challenges of bringing such facilities online. EPA has appropriately applied learnings from these experiences to ensure the most reliable prediction possible.

As the Agency noted in the proposed rule, recent advancements in enzyme and catalyst technologies have led to lower operational costs and driven down the cost for feedstock. With these technological advances, while cellulosic biofuel production remains limited, the industry continues to make significant progress towards producing cellulosic biofuel at prices competitive with petroleum fuels.⁵ These advancements have

³ See *The Proposed Rule* at 9294 (describing EPA projection of 2013 cellulosic biofuel volumes reflects EPA's best estimate of what will actually happen).

⁴ U.S. Court of Appeals for the D.C. Circuit in *API v. EPA*, No. 12-1139 (D.C. Cir. January 25, 2013) [http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/\\$file/12-1139-1417101.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/A57AB46B228054BD85257AFE00556B45/$file/12-1139-1417101.pdf)

⁵ See *The Proposed Rule* at 9287-9288



also been recognized in a number of independent financial⁶ and academic studies⁷ of the biofuels industry. The reasonable expectation that production costs and capital costs will continue to decline as the technology advances will likely lead to rapid deployment of cellulosic biofuel production in the United States once these technologies are proven at commercial scale. With continued consistent implementation and enforcement of the RFS, rapid growth in cellulosic biofuel production will follow.

Reevaluate EIA's projection from Small-scale R&D and Pilot Facilities

BIO is concerned by EPA's decision not to include any cellulosic gallons from small-scale R&D and pilot facilities⁸, since a handful have completed the lengthy registration process and obtained pathway approval to generate Renewable Identification Numbers ("RINs") and two of these facilities generated RINs in 2012. We are concerned EPA's decision to omit small-scale facilities could discourage facilities with the potential to produce modest volumes of cellulosic biofuels in 2013 from entering the market to help meet the proposed rule's goals. Such action also risks delaying pathway approval for technologies in the pilot and demonstration phase until they reach large scale production, further complicating cellulosic biofuel developers' already challenging environment for attracting private capital for construction of commercial facilities. BIO supports EPA's ability to determine estimates different from EIA by taking into consideration other factors, but in this case we ask the Agency to reconsider its decision

⁶ *Cellulosic Ethanol Heads for Cost-Competiveness by 2016*, <http://about.bnef.com/press-releases/cellulosic-ethanol-heads-for-cost-competiveness-by-2016/>

⁷ Brown, T., Brown, R. "A review of cellulosic biofuel commercial-scale projects in the United States." *Biofuels, Bioprod. Bioref.* (2013) DOI:10.1002/bbb.1387.

⁸ See *id.* at 9294



to depart from EIA's methodology (and past EPA methodology) by excluding production from small-scale R&D and pilot facilities in its final rule.

BIO encourages EPA to Overcome Political and Regulatory Hurdles to Achieving the Cellulosic Biofuel Volume Assessment for 2013

In aiming for accuracy in its Cellulosic Biofuel Volume Assessment for 2013, EPA is correct to recognize the challenges biofuel producers face in meeting production goals due to innovation scale up and perfecting first-of-a-kind technology. However, BIO cautions EPA from incorporating – as proposed in the draft rule – expectations of political and regulatory uncertainty into its cellulosic volume projections.

EPA is correct to note that the short-term nature of the cellulosic biofuel producer tax credit and accelerated depreciation for cellulosic biofuel property has limited the ability of these programs to drive private investment in commercial cellulosic biorefinery construction. EPA also correctly observes that perennial legal and legislative challenges to the RFS, and budget and regulatory uncertainty in complementary federal biofuels policy, have caused some technology investors to question the long term RIN value of cellulosic biofuel.

However, EPA must carefully avoid in its rulemaking creating additional incentive for biofuel opponents to impede cellulosic biofuel commercialization through legal, regulatory and legislative interference. BIO does not believe it is proper, for example, for EPA to discount potential gallons of cellulosic biofuel production because of expected delays in funding or program implementation at other federal agencies, such as the example provided in the proposed rule about construction setbacks resulting from delays



in closing of loan guarantees from the U.S. Department of Agriculture (“USDA”).⁹ Indeed, a very significant factor in the ability of awardees to finalize loan guarantees under USDA’s Biorefinery Assistance Program is EPA’s approval the applicant’s fuel pathway under the RFS. Rather than anticipating further delays, EPA should consult with its Administrative counterparts before issuing its final 2013 RFS rule to determine what efforts USDA is taking to make this funding available, and to take any and all action within the Agency’s jurisdiction to ensure that RFS implementation is not impeding loan guarantee finalization.

As for regulatory delays within EPA itself, the Agency should not discount potential cellulosic biofuel volumes for 2013 due to delays in its own evaluation and approval for new feedstocks and biofuel processes under the RFS.¹⁰ Such an approach would have the perverse effect of codifying the Agency’s inability to implement the RFS in a timely manner. Rather, we would encourage EPA to find ways within the proposed rule to help expedite the approval of new feedstocks, which will help the industry meet its cellulosic biofuel volumes. Discounting volumes due to regulatory delays can become a self-fulfilling prophecy, and should be avoided.

BIO was encouraged by the Agency’s recent approval of cellulosic biofuels from camelina and energy cane.¹¹ However, this approval means there are now a total of five pathways for producing cellulosic biofuels that meet the RFS, while thirty companies continue to await approval of their proposals to generate qualifying cellulosic and

⁹ See *id.* at 9290

¹⁰ See *id.* at 9295

¹¹ Regulation of Fuels and Fuel Additives: Identification of Additional Qualifying Renewable Fuel Pathways Under the Renewable Fuel Standard Program (Mar. 5, 2013), 78 Fed. Reg. 43, (available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-03-05/pdf/2013-04929.pdf>)



advanced biofuels. Not only do these pathway delays stall private investment, they can also delay public investments by other federal agencies, as in the USDA loan guarantee case noted above.¹² BIO stands ready to work with EPA to expedite additional pathway approval in the near future, so U.S. companies can continue to deploy innovative technologies and produce the additional volumes necessary to meet our cellulosic biofuel volume goals.

Waiver Requests and Legal Challenges

In addition to the political and regulatory challenges in meeting the proposed rule 2013 cellulosic biofuel volume goals, BIO encourages EPA to continue rejecting all outside legal and regulatory efforts to undermine the RFS. EPA was right to deny the request of Governors from several States and a number of organizations requesting a waiver of the national volume requirements for the RFS pursuant to Section 211(o)(7)(A).¹³ Also, we recognize there will likely be legal challenges to EPA's proposed cellulosic biofuel volumes. These challenges have a negative effect on the production of cellulosic biofuels by chilling investment in the industry and slowing other regulatory rulemaking procedures necessary for the industry's progress toward commercial scale production. If allowed to slow EPA's rulemakings, these legal challenges give competing industries a tool for slowing the development of the cellulosic biofuel industry. BIO has intervened in the challenges filed by the American Petroleum Institute and the American

¹² See *The Proposed Rule at 9292*

¹³ Notice of Decision Regarding Requests for a Waiver of the Renewable Fuel Standard (Nov. 27, 2012), 77 Fed. Reg. 228, (available at: <http://www.gpo.gov/fdsys/pkg/FR-2012-11-27/html/2012-28586.htm>)



Fuel and Petrochemical Manufacturers against the 2011¹⁴ and 2012¹⁵ obligations for advanced biofuels. We will continue to support EPA's continued efforts to push back against these legal challenges.

Necessary Volume of Advanced Biofuel

BIO supports EPA setting the applicable volume of advanced biofuel at 2.75 billion gallons. This number will drive additional innovation toward the production of advanced biofuels. As discussed earlier in our comments regarding the regulatory hurdles facing cellulosic biofuel volumes, EPA is currently investigating other potential RIN-generating pathways for advanced biofuel that could result in additional volumes in 2013.¹⁶ Again, it is crucial for EPA to do all it can to approve these pathways in a timely manner, in order to meet the 2013 targets and provide certainty looking toward 2014.

Advanced Biofuel Requirement in 2014

The Agency has requested comment on the advanced biofuel requirement for 2014, when the requirement rises to 3.75 billion gallons.¹⁷ By raising the possibility at the start of 2013 that production of advanced biofuels will not be able to meet 2014 goals, EPA again risks creating in its proposed rule a self-fulfilling prophecy, potentially slowing advanced biofuel companies' entry to the market by chilling investment from the financial community and bolstering legal challenges to any future advanced biofuel projections. Moreover, it encourages obligated parties to formulate compliance strategies that discount potentially available renewable fuels. EPA should instead focus

¹⁴ American Fuel & Petrochemical Manufacturers, et al. v. U.S. Environmental Protection Agency, and Lisa P. Jackson, Administrator, No. 12-1249. (Consolidated with No. 12-1330)

¹⁵ American Petroleum Institute v. Environmental Protection Agency, No. 12-1139

¹⁶ See *The Proposed Rule at 9298*

¹⁷ See *id.* at 9301



on how it can work to approve new biofuel pathways to ensure we can meet the advanced biofuel requirement for next year, and evaluate whether it is achievable when it issues the proposed rule for the 2014 RFS.

Consideration of the Ethanol Blendwall

The proposed rule also asks for comments regarding the blendwall. BIO firmly believes that the limits to market access for biofuels commonly referred to collectively as the blendwall represent a series of barriers contrived by obligated parties¹⁸ to prevent biofuels from gaining access to the marketplace.¹⁹ Multiple avenues exist for blending additional volumes of biofuel into the nation's fuel supply. E15 blends are approved and ready for use, and production of flex fuel vehicles ("FFVs") continues to increase. These options, combined with the introduction of new "drop-in" fuel molecules, provide a suite of opportunities for RFS compliance. The main obstacle to compliance is the dilatory tactics of obligated parties to pursue the options available to them.²⁰ Obligated parties have had over five years to begin establishing the infrastructure necessary to distribute RFS-mandated biofuel volumes, but have taken few steps to do so. EPA should therefore resist all efforts by obligated parties to reduce RFS obligations based on blendwall claims. Any concession by EPA to accommodate these assertions regarding the blendwall will only serve to embolden obligated parties in their effort to resist compliance with the Clean Air Act.

¹⁸ 'Big oil' may block branded retail blender pumps: Green Plains
<http://www.platts.com/RSSFeedDetailedNews/RSSFeed/Oil/8102457>

¹⁹ Fill Up With Ethanol? One Obstacle is Big Oil,
<http://online.wsj.com/article/SB117547886199856472.html>

²⁰ Trade group requests U.S. probe of oil industry's efforts to impede renewable fuels,
<http://eenews.net/eenewspm/2013/03/19/archive/9?terms=RFA%2C+ConocoPhillips>



Instead, the Agency should encourage the development of infrastructure, such as blending pumps and FFVs, which can readily grow the supply of biofuels in the market and overcome the blendwall by allowing RINs to truly reflect their market value. This will help drive the market and encourage retailers to adopt new infrastructure as reflected in Appendix I. EPA should also seek to identify opportunities to grow biofuel markets, including adoption of a higher-octane blend as the gasoline base fuel, and expedited approval of new drop-in fuel molecules. Reconsideration of the gasoline base fuel would enable engine manufacturers to optimize beneficial characteristics of biofuels in engine design, while expedited approval of new pathways would provide obligated parties with additional options for compliance not subject to blending limitations.²¹ Rapid approval of alcohol-to-jet fuel pathways would also create additional markets for ethanol not subject to blending limits.²²

Conclusion

With cellulosic and advanced biofuels on the verge of full scale deployment, it is crucial EPA maintains its consistent and carefully balanced implementation of the RFS and its proposed projections of the proposed biofuel volumes for 2013. In doing so, it can provide biofuel producers, developers, and investors with the confidence there will be market access for these fuels, helping the industry meet the goals set in the proposed rule.

To further these efforts, we hope the Agency will give consideration to reevaluate its projections from small-scale R&D and pilot facilities, which have the ability to help

²¹ http://www.afdc.energy.gov/fuels/emerging_dropin_biofuels.html

²² <http://www.safug.org/case-studies/>



meet the 2013 advanced and cellulosic biofuel goals if they are provided the ability to generate RINs.

BIO also encourages EPA to overcome political and regulatory hurdles toward achieving greater cellulosic biofuel volumes in 2013. In particular, BIO stands ready to offer its expertise to help EPA move forward with pathway approvals for new feedstocks to generate cellulosic and advanced biofuels.

Unfortunately, BIO also anticipates EPA will again face waiver requests and legal challenges if the Agency maintains the 2013 cellulosic biofuel volume goals. BIO urges EPA to continue to reject all outside legal and political challenges to undermine the RFS, and will continue to look for ways to be supportive toward this goal.

BIO hopes the Agency will avoid creating a self-fulfilling prophecy, by prematurely setting the advanced biofuel requirement for 2014 a year ahead. Instead, the Agency should give industry the signal that the volumes will be there and allow them to build up the infrastructure to meet the targets in 2014.

Finally, as the Agency examines the impact of the blendwall, BIO strongly urges it to investigate barrier preventing biofuels from gaining greater access to the marketplace by obligated parties. Rather than seeing the blendwall as a barrier to greater biofuel production, the Agency should consider a market-based approach to further the development of infrastructure and to push for the development of new feedstocks and "drop-in" fuels to meet RFS obligations.

If the Agency maintains the 2013 RFS goals, we are poised to continue the development of advanced and cellulosic biofuels, furthering the goals of American energy independence in the transportation sector while reducing greenhouse gas emissions through cleaner burning biofuels. We are on the cusp of commercialization of



cellulosic and advanced biofuels because of the consistency the RFS has provided over the past eight-years. As such, we encourage the EPA to maintain this stability driving the development in the industry as the Agency finalizes the *Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards*.²³

Thank you for considering these comments.

Sincerely,

A handwritten signature in black ink that reads "Brent Erickson".

Brent Erickson
Executive Vice President
Industrial and Environmental Section
Biotechnology Industry Organization

²³ *The Proposed Rule*