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The Honorable Michael S. Regan Administrator U.S. Environmental Protection Agency EPA Docket Center Air Docket Mail Code 28221T 1200 Pennsylvania Avenue, NW Washington, DC 20460 ATTN: Docket ID No. EPA-HQ-OAR-2021-0427

Re: Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes, 87 Fed. Reg. 80,582 (Dec. 30, 2022)

Dear Administrator Regan:

South Dakota Farmers Union (SDFU) represents family-scale farmers and ranchers across the state of South Dakota, with members in all 66 counties. SDFU believes that good opportunities in production agriculture are the foundation of strong farm and ranch families, and strong farm and ranch families are the basis for thriving rural communities. Vibrant rural communities, in turn, are vital to the health, security and economic well-being of our entire national economy. The Renewable Fuel Standard (RFS) program is one of those important opportunities, because biofuels create a price-stabilizing mechanism, encourage much-needed reinvestment in our rural communities, and contribute significantly to net farm income. In light of these substantial and needed benefits, SDFU's National counterpart, National Farmers Union (NFU) policy calls for strong support of the RFS and expanding the mandate for renewable fuels to make up a third of the U.S. fuel supply.¹ Because of the significant interest of SDFU, NFU and its members in EPA's implementation of the RFS program's volume requirements, SDFU appreciates the opportunity to submit these comments on EPA's proposal entitled "Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes" (hereinafter referred to as the "RFS Proposal"). The RFS Proposal would address the volume requirements for compliance years 2023-2025 and includes completion of EPA's proposed approach for addressing the remanded 2016 standard-setting rulemaking, as well as other regulatory changes to the RFS regulations.

¹ Policy of the National Farmers Union, Art. VIII.C.3, 2022, <u>https://nfu.org/policy/</u>.

SDFU supports EPA's proposal to include volumes for 2023, 2024, and 2025. Setting volumes for these three years allows the program to get back on track from a timing perspective, as EPA is already late in setting the 2023 and 2024 volumes and the 2025 volume is required by November 1, 2023. We are concerned with the "possible 2026" volume requirements" and, thus, do not believe EPA should set the 2026 volumes at this time. SDFU is pleased that the RFS Proposal would maintain the implied conventional biofuel RFS volume at 15 billion gallons for compliance year 2023 and the supplemental requirement to complete EPA's approach to restore the improperly waived 500 million gallons of renewable fuel volume requirements from 2016. While we generally agree that 2022 and 2023 should establish that a 15.25 billion gallon "implied" conventional program can be achieved for 2024 and 2025, we are concerned that EPA underestimates the potential for advanced biofuels for all three years. Congress sought to aggressively increase advanced biofuel volumes, and the minimal 100 million gallon increases in EPA's proposal do not meet the intent and goals of Congress. As such, the overall proposal falls short of preserving the integrity of the RFS—which is to drive the biofuels market and grow the industry. SDFU is calling for standards that protect investments and move the program forward and urges EPA to preserve and enforce the conventional biofuels volumes at 15.25 billion gallons but to increase the advanced biofuel volumes.

You have recognized the need to work with agricultural stakeholders and rural communities to tackle the climate crisis, advance environmental justice, and build a sustainable future. The RFS program and biofuels generally are key components to meeting this Administration's goals in each of these areas. EPA must reject calls to further reduce the volume requirements and must ensure robust volume requirements that will further the goals of Congress. Indeed, more must be done to continue to promote the biofuels industry, such as easing the restrictions on use of mid-level ethanol blends (e.g., E30) that are a cost-effective low carbon fuel that benefits farmers, rural communities, consumers, the environment, and the national economy. Farmers have consistently responded to the needs of this country, including meeting demand from a growing RFS program. EPA's concerns regarding available feedstock and diversion from other markets are misplaced.

I.

THE RFS PROGRAM IS A KEY COMPONENT OF THIS NATION'S POLICY TO ADDRESS THE CHALLENGES ASSOCIATED WITH CLIMATE CHANGE, AND FARMERS STAND READY TO HELP TACKLE THOSE CHALLENGES.

SDFU and its members are longstanding proponents of the RFS and its proper implementation, because the RFS provides numerous benefits to farmers, rural communities, and consumers. Among other things, the RFS:

• Reduces emissions of greenhouse gases (GHGs) that drive climate change and emissions of harmful air toxics and other pollutants that contribute to smog and adversely affect human health;

- Creates jobs that cannot be outsourced;
- Reduces U.S. dependence on foreign fuel sources;
- Drives investment in rural communities;
- Opens the transportation fuels market to competition; and
- Lowers transportation fuel prices for consumers.

The RFS also can establish trust with farmers—a population that is prone to regard federal policy with skepticism and may be vulnerable to a variety of confusing climate messages— to work together toward climate resilience. The RFS program is designed to provide the certainty needed to make the necessary decisions for farmers to do their part to contribute to expanded use of renewable fuel, as does the rest of the industry. Farmers and rural communities have invested significant assets based on the reasonable expectation that EPA would fulfill its responsibility to provide the appropriate incentives to grow the renewable fuels industry. As the RFS program moves into a new phase where EPA is to set the volumes rather than ensure those prescribed in the statute, EPA should implement the RFS program in a way that rewards these investments and incentivizes farmers and stakeholders to continue to take action to meet climate resiliency goals.

A. SDFU Takes Seriously the Interaction Between Climate Change and Agriculture.

As a family farm organization, SDFU is particularly concerned with the challenges climate change poses to family farmers. "Rural communities, where economies are more tightly interconnected with agriculture than with other sectors, are particularly vulnerable to the agricultural volatility related to climate."² Anticipated disruptions to agricultural production caused by climate change include: rising temperatures; changes in precipitation; increasing frequency of extreme weather events; new pest, disease and weed pressures; and increases in heat stress on livestock. Climate change also affects the ability of farmers to pursue improvements in global food security. "[C]limate risks to food security increase as the magnitude and rate of climate change increases."³ The challenges brought by climate change will make it more difficult for American farmers to produce the food, fiber, and fuel upon which the U.S. and world rely.

² U.S. Global Change Research Program, Fourth National Climate Assessment, Volume II Impacts, Risks, and Adaptation in the United States, Chapter 10: Agriculture and Rural Communities (2018), <u>https://nca2018.globalchange.gov/chapter/10/</u>.

³ M.E. Brown, *et al., Climate Change, Global Food Security, and the U.S. Food System*, U.S. Global Change Research Program, at 112 (2015), *available at* <u>http://www.usda.gov/oce/climate_change/</u> <u>FoodSecurity2015Assessment/FullAssessment.pdf</u>.

Action at local levels is needed to address climate change impacts.⁴ As formidable as these challenges may be, farmers, ranchers and rural communities can contribute to climate resilience and help circumvent serious harms to the economy and human health.⁵ While having the potential to make important economic and conservation contributions to climate change mitigation and adaptation, rural communities also face economic difficulties that must be overcome.⁶ Strong and ambitious RFS requirements increases the opportunity to mitigate climate disturbances to agriculture and promote the growth of markets for cellulosic and advanced biofuels. The RFS, when implemented properly, offers farmers and consumers a way to reduce GHG emissions by producing and utilizing transportation fuels with lower lifetime emissions than transportation fuels derived from fossil sources.

As feedstock production practices and advanced biofuel technology continue to advance, the RFS should ensure that these new fuels, with even greater GHG improvements, find some safe footing in the monopolistic consumer transportation market. Once the policy succeeds in opening the transportation fuels market to competition, significantly greater GHG reductions should be expected. These reductions, combined with price advantages that can be expected as production and distribution expand, could knock out a substantial portion of the transportation sector's total emissions. These emissions reductions will mitigate the climate change-driven hazards to agricultural production.

B. Farmers have Significantly Contributed to Enhancing This Country's Economy, Energy Independence and Environment.

Farmers have been the backbone of the growing biofuels industry in the United States. In addition to supporting the corn ethanol industry, farmers contribute to advanced biofuel volumes, helping the biofuels industry continue to diversify their feedstocks. The biofuels industry continues to innovate to help move this country toward decarbonization, such as converting ethanol into sustainable jet fuel. Farmers stand ready to significantly contribute to these efforts.

Facing significant hurdles with expanding urban areas and loss of agricultural lands, farmers nonetheless have increased yields, helped move this country toward energy independence, and protected the environment. And, unlike fossil fuel production, farmers have done this in a sustainable way. The expansion of the RFS has only supported these

⁴ Intergovernmental Panel on Climate Change, Special Report: Global Warming of 1.5^oC (2018), <u>http://ipcc.ch/report/sr15/</u>.

⁵ See Brown, supra n.3, at 112 ("[E]ffective adaptation can reduce food-system vulnerability to climate change and reduce detrimental climate change effects on food security...").

⁶ U.S. Global Change Research Program, Fourth National Climate Assessment, Volume II Impacts, Risks, and Adaptation in the United States, Chapter 10: Agriculture and Rural Communities (2018), <u>https://nca2018.globalchange.gov/chapter/10/</u>; *see also* Keith L. Kline, *et al.*, *Reconciling food security and bioenergy: priorities for action*, Global Change Biology Bioenergy (2016), *available at* <u>http://onlinelibrary.wiley.com/doi/10.1111/gcbb.12366/epdf</u>.

efforts, allowing farmers to continue to innovate and find new ways to bring added value to their farmland and production.

The Renewable Fuels Association (RFA) has estimated that, in 2021, the use of ethanol in the U.S. fuel supply reduced crude oil imports by over 530 million barrels.⁷ These energy security benefits stem from reducing the need for imports, diversifying fuel sources, increasing competition at the pump, and supporting innovation. The RFS program also has resulted in significant environmental benefits. In particular, an analysis of the program through 2020 showed significant GHG reductions with cumulative carbon dioxide savings of 980 million metric tonnes.⁸ The RFS program is supposed to incentivize increasing use of advanced biofuels, which are to have at least 50% reduction in lifecycle GHG emissions compared to petroleum-based fuels.

While the potential GHG emission reductions resulting directly from the RFS are significant, the policy has much more potential to contribute to climate resiliency than the directly attributable lowered emissions. Land use in the United States has long served as a sink for GHG emissions, which can be lost as farmland becomes developed.⁹ Improving economics allows farmers to retain their lands. It also gives them the ability to take additional actions to improve their land management. Land ownership in the U.S. is highly dispersed. Reaching landowners to encourage climate-smart land management practices, in the numbers needed to meet important emissions reduction goals, will be a challenge. Offering farmers a way to achieve value for participating in climate change, as a properly implemented RFS would, supports these goals.

Consumers also are likely to be called upon to contribute to climate resilience. Like farmers, consumers receive value while engaging in climate change mitigation through the RFS. The RFS has saved consumers money at the pump. Implementing volume requirements that match those in the statute would save consumers more money and opening the transportation fuels market to competition would save consumers even more. In addition, building further renewable fuel infrastructure would deter the price volatility that oil is particularly subject to. Setting a strong RFS would also require obligated parties to make additional infrastructure investments, as envisioned by Congress. Lower volume requirements than those set in the statute allows obligated parties to continue to ignore Congress's directives, thereby impeding future climate resilient actions.

⁷ RFA, *Ethanol Promotes Energy Independence - The ethanol industry is powering energy dominance*, <u>https://ethanolrfa.org/ethanol-101/energy-independence</u> (last visited Jan. 28, 2023).

⁸ Life Cycle Associates, *GHG Emissions Reductions due to the RFS2-A 2020 update*, at iii (2021), *available at* <u>https://ethanolrfa.org/file/748/LCA - RFS2-GHG-Update_2020.pdf</u>.

⁹ EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020*, at ES-19 (2022), *available at* <u>https://www.epa.gov/system/files/documents/2022-04/us-ghg-inventory-2022-main-text.pdf</u>.

EPA, however, continues to fail to adequately assess the benefits that increasing the volume requirements provides. While substantial efforts have been made to increase ethanol use, EPA's limited view of the RFS program, particularly with respect to the potential for mid-level ethanol blends, has caused EPA to fall behind in achieving the goals Congress set in establishing the RFS program. This limited view has focused on purported constraints that may increase compliance costs rather than the benefits and potential of biofuels. The failure to examine the full extent of these benefits provides an incomplete picture with respect to the asserted costs of the program. EPA must implement Congress's "market forcing policy" to achieve those benefits, not implement the program to reduce obligated party compliance costs rather than aggressively move forward with biofuels.

II.

EPA MUST SEEK TO ACHIEVE THE ECONOMIC, ENVIRONMENTAL AND ENERGY SECURITY BENEFITS SOUGHT BY CONGRESS.

A. EPA's Proposed 15.25-Billion-Gallon Volumes for Conventional Biofuel in 2023,¹⁰ 2024 and 2025 Are a Positive Step Toward Keeping the RFS Program on Track.

SDFU supports EPA's proposal to set volumes for 2023, 2024 and 2025. These volumes would include proposed implied conventional renewable fuel volumes of 15 billion gallons for 2023 and 15.25 billion gallons for both 2024 and 2025. Although we understand some representing the refining industry continue to contend that constraints on ethanol use requires lower volumes for conventional biofuels, EPA must reject these calls. A proper review of the set factors in the statute would support volumes higher than those proposed by EPA. Indeed, total net RIN generation for 2022 is estimated at around 21.3 billion, which exceeds the 20.88 billion required (including the supplemental obligation) for 2022.¹¹ The RFS program is to be market-forcing, and while delayed for 2023 and 2024, EPA can still incentivize additional volumes in all three years.

In the RFS Proposal, EPA identifies "candidate volumes," which it then claims to review based on the statutory factors under 42 U.S.C. §7545(o)(2)(B)(ii). While we support EPA's proposed volumes for the implied conventional biofuel requirement, EPA appears to continue to largely base its assessment of conventional biofuels on "ethanol consumption." *See, e.g.,* 87 Fed. Reg. at 80,600. Consumption, however, is not among the factors EPA is required to consider, and such consideration would appear contrary to its market-forcing

¹⁰ This volume includes the supplemental 250 million gallons to address the remand of the 2016 renewable fuel volume requirement that was impermissibly reduced by 500 million gallons using the general waiver authority.

¹¹ EPA, *RINs Generated Transactions* (as of Jan. 10, 2023), <u>https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions</u>.

purpose.¹² When EPA has issued more timely standards, over 15 billion D6 RINs were, in fact, generated to meet the 15 billion gallon obligation in 2016, 2017 and 2018.¹³ EPA does state that that it does "not believe constraints on ethanol consumption should be the single determining factor in the appropriate level of conventional renewable fuel to establish for 2023-2025." *Id.* at 80,626. We certainly agree that it cannot be determinative and that the request of some obligated parties to limit the conventional biofuel volume based on these constraints must be rejected.

EPA notes that E15 and E85 are one avenue through which higher volumes of renewable fuel can be used. 87 Fed. Reg. at 80.626. But EPA does not consider mid-level ethanol blends (e.g., E20-E40) in its analysis, even though these fuels are in use by flexible fuel vehicles.¹⁴ Studies have shown that mid-level ethanol blends are also compatible with non-FFVs, and SDFU has urged EPA to facilitate the use of mid-level ethanol blends in all vehicles. If EPA is, in fact, concerned with so-called "constraints" on ethanol use, then, as NFU has urged, EPA can take action to facilitate use of mid-level ethanol blends, such as E30. Instead, EPA appears to be making it more difficult to use higher blends of ethanol, even in flexible fuel vehicles.¹⁵ Mid-level ethanol blends, however, are a popular fuel for use in these vehicles, and EPA should facilitate their use. The U.S. Department of Energy's Alternative Fueling Station Locator lists 1,475 U.S. public fueling stations that offer midlevel ethanol blends.¹⁶ Studies also have also shown that RVP concerns are reduced with mid-level ethanol blends, compared to E15, and emissions reductions are greater with increased displacement of fossil fuels. SDFU and NFU have provided EPA with numerous ways to remove regulatory hurdles to providing these cost-effective, low-carbon, high octane fuels.

¹² EPA appears to claim it can consider additional factors. Certainly to the extent these factors are used to limit the increases in the volume requirements, this must be incorrect. Under 42 U.S.C. §7545(o)(2)(B)(ii), the applicable volumes "shall be determined ... based on a review of the implementation of the program during calendar years specified in the tables, and an analysis of" a list of statutory factors. This defines the factors that EPA is to consider, and "an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Moreover, we repeat that the program is intended to be market-forcing. Setting the volumes based on *perceived* limitations does not comport with the market-forcing goals of the program.

¹³ EPA, *RINs Generated Transactions* (as of Jan. 10, 2023), <u>https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions</u>. Almost 15 billion RINs were generated in 2019.

¹⁴ See Jessie Stolark, *Fact Sheet – High Octane Fuels: Challenges & Opportunities*, Environmental and Energy Study Institute, June 12, 2015, <u>https://www.eesi.org/papers/view/fact-sheet-high-octane-fuels-challenges-opportunities</u>.

¹⁵ See Petition for Reconsideration or Rulemaking Submitted on Behalf of Urban Air Initiative, Inc., et al., Aug. 9, 2019, *available at* <u>https://www.epa.gov/sites/production/files/2019-08/documents/</u> uai 19-1161_ppfr_08092019.pdf.

¹⁶ This station locator is available at <u>https://afdc.energy.gov/stations/#/analyze</u>.

Nonetheless, we agree that "sustained and predictable support of higher-level ethanol blends through the level of the implied conventional renewable fuel volume requirement helps provide some longer-term incentive for the market to invest in the necessary infrastructure." 87 Fed. Reg. at 80,626. We agree, but EPA has also indicated that it anticipates the implied conventional biofuel program to be filled by advanced biofuels. As further discussed below, we believe EPA must increase the advanced biofuel program, allowing the incentives for higher blends of ethanol to be meaningful.

EPA acknowledges that "[s]everal of the factors [it] analyzed highlight the importance of ongoing support for ethanol generally and for an implied conventional renewable fuel volume requirement that helps to incentivize the domestic consumption of ethanol." 87 Fed. Reg. at 80,626. EPA references the economic advantages to the agricultural sector,¹⁷ the reduction in reliance on foreign sources of petroleum, and the reduction in GHG emissions that comes with increasing ethanol consumption. Id.

SDFU notes that it appreciates EPA's efforts to update its modeling of lifecycle GHG emissions based on advancements in lifecycle modeling since 2010. 87 Fed. Reg. at 80,611. SDFU has expressed support for using the updated GREET model for conducting lifecycle GHG analysis, which we believe provides a neutral and transparent model for estimating and comparing GHG emissions reductions. EPA has indicated it will consider other models that we believe incorporate different policy considerations. While EPA contends this analysis will assist in understanding the capabilities of the models, we do not see how a potentially wide-ranging comparison (see, e.g., DRIA at 153-154, 166, 173) would be helpful to assess the statutory factors under set. We further would oppose consideration of certain purported assessments of land use impacts that rely on satellite data to the extent EPA is considering such analysis as part of this proposal. See, e.g., DRIA at 143. These analysis based on satellite data are subjective and highly uncertain.¹⁸ Real world data shows claimed impacts from changes in land use cannot be tied to biofuel production and, moreover, have been significantly overstated. EPA acknowledges that there "exists substantial uncertainty in projecting changes in land use and management associated with corn, soybeans, and other crops." DRIA at 252.

RFA%202021%20Economic%20Impact%20Report%20Final.pdf.

¹⁷ While recognizing these benefits, EPA underreports them. For example, EPA limits its discussion on job impacts to direct jobs at ethanol plants, ignoring the more than 407,400 jobs in all sectors of the economy supported by the ethanol industry in 2021. Compare EPA, Draft Regulatory Impact Analysis: RFS Standards for 2023-2025 and Other Changes (hereinafter referred to as "DRIA"), at 400 (2022), with John Urbanchuk, Contribution of the Ethanol Industry to the Economy of the United States in 2021, at 9 (2022), available at https://d35t1svewk4d42.cloudfront.net/file/2141/

¹⁸ Farzad Taheripour, Comments on "Environmental Outcomes of the US Renewable Fuel Standard", at 2 (2022), available at https://greet.es.anl.gov/publication-comment environ outcomes us rfs.

SDFU also believes EPA's analysis of the set factors is incomplete.¹⁹ We believe other factors EPA is to consider also support maintaining strong volume requirements for conventional biofuels, which include, but are not limited to:

- providing stability and certainty to allow ethanol production facilities to use more efficient process technologies to reduce their GHG emissions;²⁰
- reductions in emissions of other air pollutants compared to petroleum-based fuel, such as air toxics like benzene;²¹
- production capacity and ability to produce and distribute over 17 billion gallons of domestic ethanol (as of January 1, 2022);²²
- 99% of D6 ethanol RIN generation from 2019-2022 is from domestic production;²³
- supporting farmers allows continued investments in increasing crop yields, including through incorporating rotational or cover crops that improve soil

¹⁹ Much of EPA's review of environmental factors mirrors the inadequate and insufficient assessment in the Triennial Reports submitted to Congress. Many of the potential environmental risks identified for biofuel expansion are likely to be mitigated through existing regulations, best management practices, efficiency gains, and technology adoption. For example, "[a]gricultural water users can optimize water use efficiency and protect the quality of water resources by applying basic information about irrigation systems, crop water use and management practices." University of Nebraska-Lincoln, *Irrigation and Water Management for* Corn, <u>https://cropwatch.unl.edu/corn/water</u> (last visited Jan. 28, 2023). Although EPA claims that increases in crop prices increases the incentive to use water, EPA's DRIA (at 274, 279) also acknowledges that irrigated lands for corn decreased from 2013 to 2018. The ability to mitigate these impacts and the contributions of the RFS to give farmers greater economic stability to take necessary actions are not assessed by EPA.

²⁰ While EPA references grandfathered plants as not having to meet the 20% GHG reductions for renewable fuel, ethanol facilities have taken action to reduce their GHG emissions and have pledged to become net-zero by 2050. *See* RFA July 27, 2021 Press Release, *RFA Pledge to President: Ethanol to Achieve Net Zero Emissions by 2050 or Sooner*, <u>https://ethanolrfa.org/media-and-news/category/news-releases/article/2021/07/rfa-pledge-to-president-ethanol-to-achieve-net-zero-emissions-by-2050-or-sooner</u>.

²¹ EPA contends that ethanol plants have worse emissions rates per BTU than gasoline. DRIA at 97. We believe this comparison is inappropriate and excludes many important pollutants, such as toxic air pollutants. EPA cannot isolate the impacts of gasoline. Indeed, EPA's analysis of environmental justice concerns highlights the significant impacts on air quality of petroleum refineries, especially on disadvantaged communities. 87 Fed. Reg. at 80,617.

²² U.S. Energy Information Administration (EIA), *U.S. Fuel Ethanol Plant Production Capacity*, <u>https://www.eia.gov/petroleum/ethanolcapacity/</u> (release date Aug. 8, 2022).

²³ EPA, *RINs Generated Transactions* (as of Jan. 10, 2023), <u>https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions</u>.

health and can reduce the potential impacts on water use and water quality from agricultural runoff;

- contributions to the rural economy help farmers and rural communities take further actions to mitigate climate change and use more sustainable agricultural practices; and
- reduction in consumer costs at the pump due to cost-effectiveness of ethanol.²⁴

These benefits occur by providing a stable and certain market for agricultural commodities and products. EPA makes little reference to these benefits, focusing, instead, on potential impacts from crop production generally. But crop production will continue to occur regardless of the RFS program,²⁵ and farmers continue to make improvements, using less land for agricultural production.

B. EPA Should Ensure Robust Advanced Biofuel Volume Requirements for 2023, 2024 and 2025.

U.S. farmers do not just support corn ethanol, which makes up the bulk of the implied conventional biofuel requirement. They also support other biofuels, such as advanced ethanol, cellulosic ethanol, and biomass-based diesel. The "fundamental objective' of the Renewable Fuel Program 'is clear'": To increase the use of renewable fuels in the U.S. transportation system. *Ams. for Clean Energy v. EPA (ACEI)*, 864 F.3d 691, 700 (D.C. Cir. 2017) (quoting 80 Fed. Reg. 77,420, 77,421 (Dec. 14, 2015)).

Despite the clear indication that Congress sought to aggressively increase advanced biofuel production, EPA indicates that it "believe[s] that increases in the implied volume for non-cellulosic advanced biofuel in the 2023-2025 time frame should be relatively small in comparison to the 500 million RIN increase that occurred in 2022." 87 Fed. Reg. at 80,602. This is based on purported concerns with availability of "low-GHG feedstocks" and that non-cellulosic advanced biofuels are likely to be needed to meet the implied conventional biofuel volume of 15.25 billion gallons. *Id.* As such, EPA is only proposing 100 million RIN increases, which essentially would only be met by increases in biomass-based diesel. *Id.* EPA does not define "low-GHG feedstocks," but Congress only required that the fuel be from "renewable biomass" and meet the 50% reduction requirement. Neither of these

²⁴ EPA did an assessment of costs, which we believe does not accurately reflect the costs that Congress included to be considered. EPA did not attempt to quantify many of the benefits, however. And Congress did not require a cost-benefit analysis. Nonetheless, we believe, even under EPA's assessment, the costs associated with the implied conventional biofuel volume requirement is minimal and far outweighed by the benefits.

²⁵ EPA's DRIA (at 406) acknowledges: "This data suggests domestic corn production has grown steadily at a 25-year average rate of around 2%, or 250 million bushels per year, with no apparent correlation to ethanol production volumes."

considerations would appear based on or, therefore, appropriate under the set factors that EPA is to consider.

Regardless, we believe EPA's concerns regarding available feedstocks are largely misplaced. EPA appears to ignore studies that have found sufficient feedstock to meet a growing advanced biofuel program, much higher than the minimal increases in EPA's proposal.²⁶ Further, testimony by farmers at EPA's public hearing called into question EPA's findings with respect to feedstock availability.

Farmers have invested in the renewable fuels industry. For advanced biofuels, EPA appears to focus its analysis on soybean oil, but there continues to be room to expand soybean production. With the expectation of growing RFS volumes, it has been reported that over 24 major expansions or brand-new crush plants for soybeans have been announced or are underway.²⁷ These plants can often also crush canola. Although canola oil had already been approved for biodiesel, EPA recently approved additional pathways for renewable diesel, heating oil, jet fuel, naphtha, and LPG. We were very pleased to see these pathways finalized, and they further support investments in increasing crush capacity.

Numerous crops have already been approved for production of advanced biofuels, and we believe more could be available if EPA provided the right incentives. And, these are "low-GHG" feedstocks. The limited volume increases for advanced biofuels do not provide sufficient incentive to utilize crops that may be available. For example, canola is an ideal rotational crop, which can increasingly be grown in the United States. It provides numerous benefits, such as increasing disease resistance, improving soil carbon, and disrupting pest cycles. This can further improve yields without land use impacts. In addition, there may be opportunities for farmers to use cover crops, which could provide added benefits to crop production and soil health without land use impacts, but the lack of a certain market for those crops creates undue risks for farmers.²⁸

²⁶ LMC International, *The Outlook for Global Lipid Feedstocks to 2030* (2022), attached to the Comments of the Advanced Biofuels Association, dated Feb. 4, 2022 (EPA-HQ-OAR-2021-0324-0476), *available at* https://advancedbiofuelsassociation.com/wp-content/uploads/2022/02/ABFA-2022-RVO-Comments-FINAL.pdf. This study focused on lipids available for renewable diesel production. While EPA has essentially estimated any increases in advanced biofuels will be for renewable diesel only, other biofuels can contribute to the advanced biofuel category.

²⁷ Amie Simpson, *Clean Fuels Growth Fueling Soybean Crushing Expansion*, Brownfield, Jan. 26, 2023, <u>https://brownfieldagnews.com/news/clean-fuels-growth-fueling-soybean-crushing-expansion/</u>.

²⁸ Approved crop-based feedstocks include, but are not limited to, corn, soybean, camelina, sorghum, canola/ rapeseed, certain energy crops, cottonseed, carinata, and jatropha. EPA also allows annual cover crops, so long as it "has no existing market to which it can be sold except for its use as feedstock for the production of renewable fuel." 40 C.F.R. §80.1401. This definition is so limiting that any farmer would be reluctant to accept the risk of using such crops.

While EPA claims to have done an assessment of the statutory factors, EPA clearly only considers "the potential for significant GHG reductions that may result from [advanced biofuel] use, balanced with the relatively small projected increases in related feedstock production through 2025 and the potential negative impacts associated with diverting some feedstock from existing uses to biofuel production." 87 Fed. Reg. at 80,625. But a proper review of the set factors under the statute would also support volumes of advanced biofuels that are higher than those proposed by EPA. In addition to the significant GHG reductions associated with advanced biofuels, these factors include:

- high domestic production capacity, which, coupled with the higher RIN values for biomass-based diesel, presents significant opportunities to grow the advanced biofuel program;
- high domestic production also creates domestic jobs and contributes to the rural economy; and
- energy security benefits by diversifying feedstocks and fuels for energy use and reducing the need for foreign imports of crude oil.

Essentially ignoring these benefits, EPA's limiting the growth of advanced biofuels based on some "potential" for the diversion of feedstocks, such as vegetable oils, from other markets is arbitrary. Farmers continue to innovate to increase yield and production to meet all the demands of the market and to do so in a sustainable way.²⁹ Despite the growth of the RFS program, cropland in the U.S. remains well below the 402 million acres of existing agricultural land in 2007. 87 Fed. Reg. 39,600, 39,635 (July 1, 2022). Preserving or bringing these lands back into production is in the public interest, and conversion of agricultural land to urban development has slowed in recent years but remains a significant concern. Moreover, as explained above, improved economics at the farm will help promote action toward sustainability. While EPA refers to potential issues "abroad," there is no indication that Congress sought EPA to consider such attenuated and speculative impacts when assessing the statutory factors. In any event, recent analysis shows that biofuel production in the United States has had significantly less impacts than has been estimated in the past. As such, EPA's reference to the mere "potential" for such impacts is not sufficient analysis to

²⁹ See, e.g., M. Wu, Energy and Water Sustainability in the U.S. Biofuel Industry, at 1-2 (2019), available at https://ethanolrfa.org/file/2002/Energy-Water-Sustainability-in-the-US-Biofuel-Industry Argonne 2019-06.pdf ("The biofuel industry has made a concerted effort to conserve resources, diversify energy sources, and recycle and reuse water.").

claim lower volumes are appropriate, as it is based on questionable or outdated analysis and ignores these other dynamics. $^{\rm 30}$

To support its proposal, including the advanced biofuel volumes, EPA inexplicably states that it believes "these proposed volume requirements would preserve and continue the gains made through biofuels in previous years when the statute specified applicable volume targets," 87 Fed. Reg. at 80.627. But. EPA ignores that, when EPA sets the volumes on time, the advanced biofuel industry has typically exceeded expectations (and EPA points to no data showing actual diversion of feedstocks). For 2022, EPA set a non-cellulosic biofuel volume of 5 billion ethanol-equivalent gallons. As of January 10, 2023, however, EPA reports more than 6.118 billion net D4 and D5 RINs generated for 2022. This is an increase of over 1 billion RINs from 2021 (5.105 billion D4 and D5 net RINs generated). D5 RINs alone increased by more than 100 million RINs, and 6.118 billion is more than EPA is proposing for *all* advanced biofuels in 2023. When you include estimated D3 RINs in the calculation, 2022 advanced biofuel RINs generated exceeded the total advanced biofuel volume EPA is proposing for 2024, which includes a significant jump in the D3 volumes as a result of renewable electricity. Yet, EPA somehow contends that its proposed rule reflecting 100 million RIN increases for non-cellulosic biofuel from its 2022 required volume continues these gains. EPA must do more to support advanced biofuels.

C. EPA Should Facilitate Corn Kernel Fiber Ethanol Production and Include Projections for its Production in Setting the Volumes.

EPA requests comment on whether it should include estimates for corn kernel fiber ethanol in its cellulosic biofuel projections. 87 Fed. Reg. at 80,595. While we appreciate that EPA issued revised guidance in September 2022, SDFU believes EPA should resolve the outstanding technical and regulatory issues to allow corn kernel fiber ethanol to generate RINs. EPA previously estimated as much as 210 million additional gallons of cellulosic biofuel could have been produced from corn kernel fiber in 2022. 86 Fed. Reg. 72,436, 72,452 (Dec. 21, 2021); *see also* DRIA at 315 (noting operational corn kernel fiber ethanol facilities). These are volumes that are being produced or ready to be produced and, as such, these volumes should be included in EPA's projections.

Generally, we have concerns that the cellulosic biofuel volumes, which will include renewable electricity in 2024 and 2025, are too low. According to EPA's own analysis, there could be significantly more RINs generated than EPA includes in the proposed volumes.

biotechnologyforbiofuels.biomedcentral.com/articles/10.1186/s13068-020-1650-1; cf. Joshua Pritsolas and Randall Pearson, *Critical Review of Supporting Literature on Land Use Change in the EPA's Second Triennial Report to Congress* (2019), *available at* https://ethanolrfa.org/file/1834/SIUE-Review-of-Land-Use-Change-Literature-07-2019.pdf (discussing data concerns with studies purporting to show land conversion from biofuel production).

³⁰ See, e.g., Farzad Taheripour and Wallace E. Tyner, US biofuel production and policy: implications for land use changes in Malaysia and Indonesia, Biotechnology for Biofuels (2020), <u>https://</u>

DRIA at 338-339. This would indicate that the volumes proposed are insufficient and may undermine existing investments or fail to ensure continued investments in other biofuels.

D. EPA Must Finalize Its Proposal to Complete is Actions to Address the Improperly Waived 500 Million Gallons of Renewable Fuel Requirement From 2016.

In November 2015, EPA finalized a 2016 RFS requirement that included an implied requirement of 14.5 billion gallons of conventional biofuels. 80 Fed. Reg. at 77,422, 77,439. This included a 500-million-gallon reduction of the (implied) statutory requirement of 15 billion gallons for conventional biofuels, which EPA attempted to base on its general waiver authority, arguing "inadequate domestic supply." In July 2017, the D.C. Circuit held, in *ACEI v. EPA*, that EPA erred in reducing the 2016 requirement from its statutory level, rejecting EPA's assertion of general waiver authority. The 2016 RFS was remanded back to EPA, who must enforce the volume requirements for 2016. EPA finally instituted a partial remedy to redress this lost volume by requiring a supplemental obligation of 250 million gallons in 2022. EPA now proposes to complete this action by requiring a second supplemental volume requirement of 250 million gallons in 2023. NFU and SDFU agrees with EPA's approach and EPA must finalize the supplemental obligation.³¹

The 500 million gallons remain a volume requirement that Congress directed EPA to ensure that EPA has failed to implement. By adding these volumes onto future volume requirements, EPA finally would be meeting its obligation to ensure the statutory volumes, *and* obligated parties have ample time to prepare for their obligations. While EPA is also delayed in setting the 2023 supplemental standard, it would only be partly retroactive, and the impacts of the supplemental volume requirement would not be unduly burdensome. Indeed, obligated parties have long been on notice regarding the Court's remand order and that EPA was going to complete the remedy by imposing a supplemental obligations, including the supplemental volume requirement. With the carryover RINs EPA sought to preserve in resetting the 2020 volume requirements, this provides more than enough prioryear RINs to carryover to be used to meet the supplemental volume obligation. Moreover, EPA has consistently found that obligated parties pass through the costs of RINs. Restoring the market-forcing scheme Congress established and confirming that EPA must enforce the volume requirements far outweighs any potential burdens on obligated parties.

³¹ NFU, along with other biofuel petitioners, requested the D.C. Circuit to enforce its mandate, and such request is in abeyance pending EPA's rulemaking here.

³² See, e.g., Jordan Godwin, *EPA to Propose Splitting 500-Million-Gal RFS Remand in 2021, 2022: Sources*, OPIS, June 17, 2020, <u>https://www.governorsbiofuelscoalition.org/epa-to-propose-splitting-500-million-gal-rfs-remand-in-2021-2022-sources/; see also</u> 87 Fed. Reg. at 80,620 (noting EPA's notice of intention to issue a supplemental standard in December 2021).

E. EPA Must Account for Small Refinery Exemptions and Must Require Small Refineries to Come into Compliance.

SDFU appreciates EPA's recent denial of small refinery exemptions. SDFU believes EPA appropriately considered the remaining holdings in *RFA v. EPA*, 948 F.3d 1206 (10th Cir. 2020), *rev'd in part by, HollyFrontier Cheyenne Ref. LLC v. RFA*, 141 S. Ct. 2172 (2021). As the Tenth Circuit found with respect to the three challenged exemption requests in that case, EPA had improperly expanded its grant of small refinery exemptions for reasons not related to economic hardships caused by RFS compliance. SDFU further agrees that the substantial evidence shows that refiners can pass costs of RINs through their fuel sales. Notwithstanding the findings of the majority of the U.S. Supreme Court, Congress did intend these exemptions to be the exception, not the rule.³³

However, exemption requests continue to be submitted to EPA, and there are several litigation challenging EPA's denials. If EPA is going to continue to project zero exemptions, EPA must ensure that any exemptions subsequently granted do not affect the volumes. While we do not oppose a three-year program, EPA does not indicate what will happen in such cases. We believe EPA can wait to set the standards, which would allow the use of more updated projections and to allow EPA to better account for any small refinery exemptions. EPA has admitted that its prior handling of small refinery exemptions had a significant impact on the volumes. Where RFS compliance must be the cause of the disproportionate economic hardship, there is no rationale for small refineries to wait to request an exemption from the program, and EPA should allow these requests to be submitted and responded to before the standards are set.

Even if EPA does not impose deadlines for seeking exemptions, EPA is required to "ensure" transportation fuel sold in the United States includes the minimum applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel.³⁴ It is important to note that these are, in fact, *minimum* volumes that are meant to be achieved. As long as EPA continues to allow for retroactive exemptions, it must account for them in setting the standards. Alternatively, EPA should make clear that it will adjust the volume requirements in the event its projections on small refinery exemptions are incorrect and have a material impact on the volume requirements.

³³ The American Petroleum Institute (API) has acknowledged that "refiners have had ample time to adjust their businesses to operate" under the RFS. *See* API Aug. 31, 2017 Cover Letter to Comments on 2018 RFS Proposal at 2 (EPA-HQ-OAR-2017-0091-3647); *see also id.* ("It is no longer appropriate for EPA to grant RFS compliance exemptions to small refineries or small refiners.").

³⁴ 42 U.S.C. §7545(o)(2)(A)(i); *see also id.* §7545(o)(3)(B)(i).

F. EPA Must Finalize the Volume Requirements, Including the Supplemental Volume, as Soon as Possible.

EPA's proposal includes a number of additional proposed regulatory changes to the RFS regulations. SDFU addresses some of these proposals below. However, as EPA notes, the volume obligations are separate actions from these regulatory changes. 87 Fed. Reg. at 80,590-80,591. EPA has already unduly delayed issuing the standards for 2023 and 2024 and responding to the D.C. Circuit's remand. While these other regulatory proposed changes may be beneficial to the program, there may be additional issues raised that EPA must consider and weigh. These other provisions must not delay finalizing the volume requirements, and EPA must finalize these standards as soon as possible, even if it must do so separately from the rest of the RFS Proposal.

G. SDFU Strongly Opposes the "Possible 2026 Volume Requirements" and the "Alternative Volume Requirements."

EPA requests comment on volume requirements for 2026. 87 Fed. Reg. at 80,628. Although it is not proposing any requirements, it indicates, if it did finalize volumes for 2026, EPA would intend to use the following volume requirements: Cellulosic – 2.56 billion RINs; biomass-based diesel – 3.02 billion gallons; non-cellulosic advanced biofuel – 5.40 billion RINs; and conventional renewable fuel – 15.25 billion RINs. *Id.* These volumes would be based on the same flawed analysis discussed above. In particular, the non-cellulosic advanced biofuel volume would remain substantially below D4 and D5 RIN generation in 2022. This is counter to the goals of the RFS program, inconsistent with the statutory factors EPA is supposed to consider, and goes backwards, not forwards.

EPA also claims to seek comment on whether the implied conventional biofuel volume requirement should be lower than EPA proposes, including whether it should be set below the E10 blendwall. Such an alternative volume would apparently be based on concerns with constraints on ethanol consumption and RIN prices. We agree that this would likely remove incentives to invest in mid-level ethanol blends, which EPA should be promoting, not undermining. We also believe that this is counter to the market-forcing intent of the program generally and, as described further above, such alternative volume requirements for conventional biofuel must be rejected.

III.

EPA'S RFS REGULATIONS MUST ENSURE THE RENEWABLE FUEL VOLUMES AND SHOULD WORK TOWARD FACILITATING RENEWABLE FUEL PRODUCTION AND SUPPORTING INNOVATION.

The RFS Proposal includes several proposed regulatory changes to the RFS regulations. SDFU addresses some of these below. SDFU generally believes EPA must ensure its regulations help promote and facilitate renewable fuel production and innovation by

promoting new fuels and processes. In doing so, EPA must be careful, nonetheless, that it does not place undue burdens on feedstock producers.

A. EPA Should Support Innovation and Not Unduly Restrict New Fuels by Imposing an Unnecessarily Stringent Definition of "Produced from Renewable Biomass."

EPA proposes to define "produced from renewable biomass" as "the energy in the finished fuel comes from renewable biomass." 87 Fed. Reg. at 80,704. EPA contends that this definition is consistent with the definition of "renewable fuel" as it must be used to "replace or reduce the quantity of fossil fuel present in a transportation fuel." *Id.* (quoting 42 U.S.C. \$7545(o)(1)(J)). While SDFU agrees that fossil-based feedstocks should not count toward RIN generation, we are concerned that EPA's proposed definition creates confusion and could exclude new fuels, such as those that seek to utilize biogenic CO₂. Indeed, the explanation of potential consequences of making this change extends several pages in the Federal Register notice with minimal discussion of why the change is actually needed. So long as the fuel used replaces fossil fuel use, we do not see a need to complicate the program further with such a definition. We believe EPA can account for non-renewable feedstocks through its pathways and RIN generation provisions, as it has done to date. EPA can provide additional guidance to make clear that fossil-based feedstocks would NOT count toward RIN generation.

B. Congress Expressly Authorizes Crop-Based Biofuels as Part of the RFS Program.

EPA indicates that it is engaged in informal consultation with the U.S. Fish & Wildlife Service and the National Marine Fisheries Service with respect to the Endangered Species Act. 87 Fed. Reg. at 80,587. While we acknowledge that the U.S. Court of Appeals for the D.C. Circuit has found that EPA has discretion to consider impacts to wildlife as part of the statutory criteria in 42 U.S.C. §7545(o)(2)(B)(ii), requiring it to make an effects determination and seek consultation as appropriate under the Endangered Species Act, we note that Congress defined the feedstocks and fuels that are eligible under the program, which include crop-based feedstocks. As such, EPA has no authority to exclude any cropbased feedstock from being eligible to participate in the program.

Further, any effects determination requires more than mere speculation. There must be some causal connection between the EPA action and the alleged impacts to endangered species or their habitat. While some have argued that crop-production impacts wildlife and their habitat as a result of land use changes and agricultural runoff, whether, where, and how these feedstocks are grown is based on other factors unrelated to the RFS program. Moreover, ensuring a market helps farmers preserve their land and take action to conserve the environment. It is not causing new lands to be destroyed. As such endangered species should not be impacted by the volumes EPA has proposed. In any case, EPA must provide the public with an opportunity to comment on any possible action EPA deems necessary as a result of this consultation.

C. EPA Should Take Action to Support Increased Use of Biofuels, Including Crop-Based Biofuels.

In the RFS Proposal, EPA indicates that it is interested in public input regarding ways in which it might enhance program administration to make the RFS program as efficient as possible, to increase program transparency, to address climate change, or otherwise improve program implementation. In so doing, EPA presents a list of questions. SDFU provides responses to certain of these questions below.

Question: How can the proposed set rule further Congress' policy goal of enhancing energy security, specifically with respect to the transportation sector?

As discussed above, EPA must increase the volume requirements for advanced biofuels. In this way, it can support continued innovation and investment in new feedstocks, increasing yields, and expanding sustainable farming practices.

Question: Are there policy changes or additional programmatic incentives that EPA should consider implementing under the RFS program to strengthen or accelerate the transition to a decarbonized transportation sector?

To the extent EPA continues to contend that there are constraints on ethanol use, EPA should include mid-level ethanol blends as part of its assessment. EPA continues to ignore the availability of these fuels.

Question: If EPA were to incorporate some measure of the carbon intensity of each biofuel into the RFS program (e.g., providing a higher RIN value for fuels with a better carbon intensity score), what approach would best advance the program's environmental objectives, and at the same time be consistent with the statutory provisions of CAA section 211(0)?

SDFU again notes that Congress defined "renewable biomass" to include crop-based feedstocks. Any consideration of carbon intensity should not disadvantage crop-based feedstocks that meet the GHG reduction thresholds in the statute.

Question: What role can the RFS program play, beyond what exists today, to further support the development of sustainable aviation fuel?

EPA can approve pathways and facilitate use of crop-based feedstocks and biointermediates (such as undenatured ethanol) for aviation fuel.

Question: Are there steps EPA should consider taking under the RFS program to integrate carbon capture and storage (CCS) opportunities related to the production of renewable fuels?

EPA can and should consider CCS opportunities as it considers ethanol efficient producer pathways and pathways for new crop-based feedstocks as appropriate to meet the GHG reduction threshold requirements for advanced biofuels.

Question: As noted earlier, should the conventional renewable fuel volume requirement be set below the E10 blendwall, while keeping the total proposed renewable fuel volume requirement unchanged?

SDFU strongly opposes reducing the implied conventional renewable fuel volume requirement to be below the E10 blendwall, as discussed above. EPA should allow advanced biofuels to make up any difference, which it essentially proposes to do by indicating advanced biofuels will likely make up the difference with the current volume requirement. It makes little sense to reduce the conventional biofuel requirement, undermining the incentives to continue to build out infrastructure and increase ethanol volumes. To the extent additional advanced biofuels are available, EPA must increase the advanced biofuel volume.

CONCLUSION

The RFS is an important policy with far-reaching direct and indirect benefits, particularly for farmers but also for consumers. Recent wavering on the RFS has caused enormous setbacks in advanced biofuels, including cellulosic biofuel development, and, consequently, delayed important GHG emission reductions. We appreciate EPA's goal of bringing some longer term certainty into the program through setting three years of volumes (and getting the program back on track from a timing perspective), but EPA's proposed volumes for advanced biofuels are inadequate to move the program forward.

In summary, SDFU urges EPA to:

- 1) Finalize the 15.25 billion gallon "implied" conventional biofuel volume requirement for all three years (which includes the supplemental volume requirement for 2023), as soon as possible;
- 2) Reject any calls to set the conventional biofuel volume requirement at or below the ethanol blendwall to continue to support investments in mid-level and higher ethanol blends;
- 3) Substantially increase the advanced biofuel requirement to promote growth, not go backwards; and
- 4) Support farmers by continuing to ensure a role for crop-based feedstocks and to promote innovation and investment in sustainable farming practices and climate change mitigation actions.

SDFU believes EPA must increase its efforts at addressing climate change and supporting actions that strengthen the climate resilience of agriculture and the food system. We stand ready to offer any support and assistance EPA may find helpful regarding these matters. Thank you for your consideration of these comments. If you have any questions or would like to further discuss SDFU's position, please contact Doug Sombke, SDFU President, via e-mail at dsombke@sdfu.org or by phone at 605-350-4211.

Sincerely,

Doug Sombke President