



May 26, 2022

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

Dear Administrator Regan,

On behalf of the Renewable Fuels Association (RFA), I write today to thank you for acting swiftly and decisively to provide emergency waivers that will facilitate the continued sales of lower-cost, lower-carbon E15 fuel blends throughout the summer driving season. As millions of Americans prepare to travel this Memorial Day weekend, your efforts will help to extend tight supplies of gasoline and reduce the potential for shortages during this time of crisis.

Our recent discussions with fuel retailers suggest that customer interest in E15 continues to grow and sales volumes have significantly increased since President Biden announced the waiver on April 12. Retailers have also conveyed to us that the availability of E15 in the marketplace could expand even more quickly if the Environmental Protection Agency (EPA) took action to finalize a stalled proposal on E15 pump labeling and underground storage tank requirements.¹

I also write to respond to a number of misleading assertions and factual inaccuracies contained in a letter sent to you on May 23, 2022, by a group of anti-biofuel advocacy organizations.² The specious arguments made by these groups should not distract your team at EPA from implementing robust Renewable Fuel Standard (RFS) requirements and staying the course on the emergency waivers for E15 this summer. The attachment to this letter corrects the record on several of the specific claims and factual errors contained in the anti-biofuel group letter.

Contrary to the allegations outlined in the anti-biofuel letter, the RFS has been a remarkable success in providing climate benefits. Biofuels usage under the RFS has resulted in the avoidance of 980 million metric tons of greenhouse gas (GHG) emissions since 2008, significantly outperforming EPA's initial expectations.³ In addition, scientists affiliated with the U.S. Departments of Energy and Agriculture, University of Illinois, Harvard University, Massachusetts Institute of Technology, Tufts University, Oregon Department of Environmental Quality, and other institutions agree that today's corn-based ethanol reduces GHG emissions by 40-50 percent compared to petroleum—more than double the reduction initially estimated by EPA in 2010.⁴ In addition to these GHG benefits, the expanded use of ethanol under the RFS has reduced tailpipe emissions of harmful air pollutants, decreased demand for petroleum imports, and lowered fuel prices for American drivers.

As the only statutory program in operation that explicitly requires liquid fuels to meet certain carbon performance requirements, now is the time to double down on—not abandon—the RFS.

¹ 86 Fed. Reg. 5094 (January 19, 2021)

² Letter to Administrator Regan from ActionAid USA et al (May 23, 2022).

³ Unnasch, S. and D. Parida (2021) GHG Reductions from the RFS2 – A 2020 Update. Life Cycle Associates Report LCA. LCA.6145.213.2021 Prepared for Renewable Fuels Association.

⁴ <https://ethanolrfa.org/file/2069/Ethanol%20a%20Low-Carbon%20Solution.pdf>

The combination of robust RFS obligations for 2020-2022 and emergency waivers for year-round E15 will continue to drive positive outcomes for both the environment and the economy.

Thank you for your ongoing commitment to implementing the Renewable Fuel Standard in a manner that provides certainty and continues to grow the market for low-carbon renewable fuels. We look forward to continuing our work together to advance the use of sustainable, American-made ethanol.

Sincerely,

A handwritten signature in black ink that reads "Geoff Cooper". The signature is written in a cursive, flowing style.

Geoff Cooper
President & CEO

Encl: Response to letter from ActionAid USA et al.

Renewable Fuels Association
Response to Letter to Administrator Regan from:

ActionAid USA, Biofuelwatch, Center for Biological Diversity, Dogwood Alliance, Earthjustice,
Food & Water Watch, Friends of the Earth, National Wildlife Federation, Partnership for Policy
Integrity, Sierra Club, and United Plant Savers

- **E15 Emergency Waiver:** There is not, nor has there ever been, an EPA-imposed “ban” on the use of E15 during the summer ozone control season, as suggested by the anti-biofuel groups. In reality, it has been difficult to market E15 in the summer months simply because the fuel has been held to a Reid vapor pressure (RVP) limit in the summertime that is 10% more restrictive than the limit applied to today’s standard gasoline (E10).¹ This more restrictive RVP limit has been applied to E15 even though the fuel’s RVP is 1-2% lower than that of E10. Due to the difference in RVP limits for E10 and E15, refiners have chosen not to produce a separate conventional gasoline blendstock suitable for E15 blending in the summertime.
- **E15 and Smog:** E15 produces less evaporative emissions (i.e., because of its slightly lower RVP)² and less exhaust emissions of volatile organic compounds than E10. These emissions reductions, along with decreases in particulate matter and toxic gas emissions, mean E15 has slightly lower ozone- and smog-forming potential in the summertime than E10. This is confirmed by recent emissions testing conducted by the University of California-Riverside.³ The UC-R scientists concluded that “ozone forming potential trended lower for E15 compared to E10,” while noting E15 “...likely reduces air toxics from current vehicles and will not lead to air quality degradation.” Moreover, in announcing the emergency waiver for E15 this summer, EPA noted that continued E15 consumption would have “no significant impacts on emissions from cars and trucks,” adding that “...consumers can continue to use E15 without concern that its use in the summer will impact air quality.”⁴
- **E15 Vehicle and Infrastructure Compatibility:** The activist letter also suggests that there are “limitations on the vehicles that can use E15 blends and the number of retailers that can store and distribute these blends...” After extensive testing, EPA approved the use of E15 in all light-duty vehicles manufactured after model year 2000, meaning more than 96% of the vehicles in operation today are legally approved to use E15.⁵ In addition, E15 is available for purchase at more than 2,500 retail stations (collectively serving roughly 500,000 customers *per day*). The fuel is a common offering in states like Wisconsin, Minnesota, Iowa, and Illinois.⁶ Notably, the availability of E15 in the retail fuel marketplace could expand quickly if EPA took action to finalize a stalled proposal⁷ on E15 labeling and underground storage tank requirements.

¹ The more restrictive RVP standard for E15 is the product of antiquated regulations that were developed roughly three decades ago, when policymakers and regulators failed to anticipate that ethanol may one day comprise more than 10% of the gasoline blend.

² EPA itself has confirmed E15’s lower evaporative emissions. See, “EPA Announces E15 Partial Waiver Decision.” EPA-420-F-11-003. January 2011. (“E15 is likely to result in somewhat lower evaporative emissions compared to fuel currently sold in much of the country (E10) as a result of the lower volatility of E15.”)

³ https://ethanolrfa.org/file/2209/CRC_2022_slides_final.pdf

⁴ <https://www.epa.gov/newsreleases/epa-issues-emergency-fuel-waiver-e15-sales#>

⁵ Vehicle in operation (VIO) age distribution from EPA MOVES model.

⁶ <http://e85prices.com/>. For example, E15 is available at more than 20% of retail outlets in Minnesota and 18% of Iowa retail outlets.

⁷ 86 Fed. Reg. 5094 (January 19, 2021)

- RFS Spurring Innovation:** The anti-biofuel groups claim that the RFS has “failed to spur innovation” in low-carbon liquid fuels like “sustainable cellulosic fuels.” While growth in advanced and cellulosic biofuel production has fallen short of the ambitious goals laid out by Congress in 2007 for a variety of reasons, EPA data show that the RFS program has still been quite effective in driving significant innovation and growth in low-carbon advanced and cellulosic biofuels. For example, production of cellulosic biofuel grew from zero gallons in 2011 to 568 million gallons in 2021. Meanwhile, total advanced biofuel production (including cellulosic biofuel) tripled from 1.92 billion gallons in 2011 to 5.67 billion gallons in 2021. In addition, EPA recently wrote that it has analyzed more than 140 new biofuel pathways since 2010, noting that “Over time, EPA has approved additional pathways for participation in the RFS program. These pathways rely on novel feedstocks...and novel production processes.”⁸
- GHG Performance of Corn-based Ethanol:** The letter from the activist groups suggests that today’s corn ethanol production “flouts” the GHG reduction objectives of the RFS and implies that most ethanol doesn’t meet the statutory 20% GHG reduction requirement for conventional biofuels. This demonstrably false. Through its Efficient Producer Pathway process, EPA has examined production data and full lifecycle GHG emissions for more than 100 individual dry mill ethanol plants. EPA has certified that these dry mill facilities are producing ethanol that meets or exceeds the 20% GHG reduction threshold. The Agency also recently estimated that the average corn ethanol dry mill is achieving a 29% GHG reduction compared to gasoline, with the best facilities achieving a 42% GHG reduction.⁹ Further, DOE’s Argonne National Laboratory and several leading universities have shown that average corn ethanol reduces GHG emissions by 40-50%, even with emissions from hypothetical (i.e., model-derived) land use changes.
- Land Use Change and GHG Emissions:** In their letter, the anti-biofuel groups reference a single, outlier study funded by the National Wildlife Federation (Lark et al., 2022) that suggests corn ethanol has a higher carbon intensity than gasoline due to purported land use changes. However, the Lark et al. study has been roundly criticized by the scientific community for massively exaggerating potential land use changes. Based on faulty assumptions and questionable methods, Lark’s inflated estimate of land use change emissions is roughly 2.5 times larger than EPA’s 2010 estimate and 7-8 times larger than the most current estimates from Argonne National Laboratory. Researchers from Argonne, Purdue University, University of Illinois, and other institutions have recently published multiple responses to the Lark et al. study in which they identify “several questionable assumptions” that result in “overestimation of the GHG emissions of corn ethanol.”¹⁰ In their latest review, they conclude that “the Lark et al. paper is more problematic than what we initially evaluated to be the case.”¹¹

⁸ <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013KOG.pdf> at 63-64.

⁹ 86 Fed. Reg. 72447 (December 21, 2021) (“Existing EPA estimates for corn starch ethanol produced in 2022 using a dry mill process and natural gas fired process heat range from a 42 percent to a 17 percent reduction over baseline gasoline, depending on the technologies used at the production facility.”) Currently, all U.S. dry mill ethanol plants use natural gas for process heat.

¹⁰ F. Taheripour et al. Comments on “Environmental Outcomes of the US Renewable Fuel Standard.” March 21, 2022. https://greet.es.anl.gov/publication-comment_environ_outcomes_us_rfs

¹¹ F. Taheripour et al. Response to comments from Lark et al. regarding Taheripour et al. March 2022 comments on Lark et al. original PNAS paper. May 25, 2022. https://greet.es.anl.gov/publication-comment_environ_outcomes_us_rfs2