

**RFA**

December 9, 2021

Via Electronic and U.S. Mail

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

Re: Request for EPA Action to Reduce RVP Cap of Summer Conventional Gasoline

Dear Administrator Regan,

The undersigned organizations write today to offer a remedy to the D.C. Circuit Court of Appeals' decision this summer that vacated the Environmental Protection Agency's (EPA) rule extending the 1-pound per square inch (psi) waiver of the Reid Vapor Pressure (RVP) volatility requirements to gasoline blends containing up to 15% ethanol (E15). The remedy we propose would result in lower evaporative and tailpipe emissions during the summer ozone control season, while also reducing greenhouse gas (GHG) emissions and facilitating the year-round sale of E15 in conventional gasoline markets.

In the wake of the court decision, we believe this approach is a relatively simple regulatory fix EPA should pursue to achieve regulatory parity for E15 and the more common gasoline blend containing 10% ethanol (E10). Specifically, we believe EPA should require the use of lower-RVP summertime conventional gasoline blendstocks (*i.e.*, 8.0 psi in attainment areas) for mixing with all ethanol blends. This would render the 1-psi waiver unnecessary for the sale of both E10 and E15 during the summer ozone control season, resulting in fewer GHG emissions and slightly lower emissions of the pollutants that contribute to ozone formation.

E15 entered the U.S. gasoline market in 2012 after EPA granted two waivers under 42 U.S.C. § 7545(f)(4), which together allowed manufacturers to sell E15 for use in Model Year 2001 and newer light-duty vehicles. Widespread sale of E15 has been limited, however, because E15 has not been eligible for the 1-psi waiver that allows the sale of certain ethanol fuel blends at 10 psi during the summer ozone season. The result is that E15 has been subject to a stricter summertime volatility limit, 9 psi, than E10, which is eligible for the waiver and can be sold at 10 psi. As EPA noted in 2019 when it issued its commonsense rule establishing RVP parity for E15, this discrepancy makes little sense, particularly given that E15 is less volatile and has lower evaporative emissions as compared to E10. The 1-psi waiver originally provided for an expansion in the production and use of fuel ethanol, but it is now having the perverse effect of preventing greater ethanol use in today's gasoline market. Further, it is obstructing the successful implementation of important renewable energy and carbon reduction policies, including the Renewable Fuel Standard.

While the D.C. Circuit determined that EPA does not have the statutory authority to extend the 1-psi waiver to E15 (a decision with which we continue to disagree), the Agency does have statutory

authority to mandate lower-RVP summertime conventional gasoline blendstocks. Under the Clean Air Act, EPA has general authority to regulate the composition of fuels, *see* 42 U.S.C. § 7545(c), and it also has specific authority to address effects on air quality based on the “renewable volumes” required by the Act, *id.* § 7545(v). These sections provide the Agency with ample authority to effectively eliminate the need for the 1-psi waiver by requiring lower-RVP gasoline blendstocks. In addition to resolving the barrier to E15 expansion, compelling refiners to produce lower-RVP blendstock would reduce fuel volatility across the board, make it easier for automakers to control evaporative emissions, assure reductions in urban ozone formation and greenhouse emissions, and provide more options for refineries to achieve the renewable volume requirements under the RFS.

A lower-volatility requirement would also be responsive to the recent request from the Governors of Iowa, Nebraska, North Dakota, Minnesota, Missouri, South Dakota, and Wisconsin for EPA to “promulgate regulations that would put E10 and E15 on equal footing with regard to volatility limitations, thus re-opening the door to unencumbered, year-round sales of both fuels.” In their letter, the Governors suggest that they might request, pursuant to Section 211(h)(5), that EPA apply volatility limitations to gasoline-ethanol blends that exclude the benefit of the Section 211(h)(4) 1-psi RVP waiver. This would result in a volatility of 9 psi or lower for both finished E10 and E15 in conventional gasoline areas. The approach we suggest here would be similar to that contemplated by the Governors, but rather than a state-by-state solution, the proposed regulatory fix would be nationally applicable.

Further, the benefits to this approach significantly outweigh its costs. The cost impact on refiners of reducing the RVP cap by 1-psi would be negligible. A new economic modeling analysis completed for the Renewable Fuels Association (RFA)¹ determined that the cost to refiners of reducing the RVP of conventional gasoline blendstock by 1 psi in the summertime is, on average, \$0.021 per gallon. Further, the study predicted that a lower volatility requirement would compel refiners to remove butanes and pentanes—low-density components of gasoline—from gasoline and replace such components with higher-density hydrocarbon blendstocks. According to the study, this shift would slightly improve fuel economy for drivers, resulting in an energy density savings of \$0.007 per gallon and a net impact on consumer costs of just \$0.015 per gallon. This recent study confirms the conclusions of a 2015 analysis completed for RFA² regarding the minimal cost impact of lowering the RVP of summertime conventional gasoline by 1 psi. The 2015 study evaluated a range of scenarios and methodologies and concluded that the refining cost impact would be \$0.022 per gallon, and a net consumer cost of less than \$0.01 per gallon.

In addition, there are emissions benefits to be gained by effectively removing the relevance of the 1-psi waiver. A new study conducted for RFA by Janet Yanowitz, P.E., Ph.D.³ using EPA’s MOVES3.0.2 tool concluded that reducing the RVP of conventional gasoline blendstock by 1 psi “...would be beneficial to air quality, as emissions of carbon monoxide (CO), oxides of nitrogen (NOx) and volatile organic compounds (VOCs) would be reduced.” The study further concluded

¹ MathPro, “Assessment of a 1 Psi Reduction in the RVP of Conventional Gasoline Blendstock (CBOB) In the Summer Gasoline Season,” November 2021 (Attachment 1).

² Confluence Consulting, “Analysis of the Cost Associated with the Elimination of the One Pound Waiver,” June 2015.

³ Janet Yanowitz, P.E., Ph.D., Ecoengineering, Inc., “Emissions Impacts of the Elimination of the 1-PSI RVP Waiver for E10,” November 2021 (Attachment 2).

that “if the elimination of the 1-psi waiver [for E10] leads to the replacement of E10 with E15, it will also decrease greenhouse gases and particulate emissions.”

Similar modeling conducted for RFA in 2015 by Air Improvement Resources, Inc. using EPA’s MOVES2014 tool⁴ indicated that eliminating the relevance of the 1-psi waiver would reduce summertime carbon monoxide emissions by nearly 16,000 tons per month (0.9%), nitrogen oxide emissions by more than 700 tons per month (0.4%), and volatile organic compounds by approximately 1,850 tons per month (1.2%). In addition, reducing the volatility of gasoline blendstock would result in significant evaporative emissions reductions from gasoline containers, small engine fuel tanks, and other gasoline storage vessels that were not examined as part of the above analyses. The economic value of these emissions reductions alone would offset any negligible increase in refining costs.

We strongly urge EPA to use its authority under the Clean Air Act to promulgate a rule mandating the use of lower-RVP gasoline blendstocks in conventional gasoline markets in the summertime. This action would improve air quality, remove arcane barriers to innovation and consumer choice in the retail fuel marketplace, simplify engineering of emissions control systems, and help facilitate compliance with the Renewable Fuel Standard requirements, with no noticeable impact on fuel costs.

Thank you for considering our input on this important issue. We would be happy to meet with you to discuss these matters further.

Sincerely,

Renewable Fuels Association
American Farm Bureau Federation
Growth Energy
National Corn Growers Association
National Farmers Union
National Sorghum Producers

cc (via electronic mail):

Sarah Dunham
Director, Office of Transportation and Air Quality
U.S. Environmental Protection Agency

Joseph Goffman
Assistant Administrator, Office of Air and Radiation
U.S. Environmental Protection Agency

⁴ Air Improvement Resources, “Analysis of the Emission Impacts of Elimination of the 1 psi RVP Waiver for 10% Ethanol Blends”, July 2015.