

April 29, 2019

Mr. Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Submitted via regulations.gov

RE: Comments from ActionAid USA, Clean Air Task Force, Earthjustice, Mighty Earth, and Sierra Club on the U.S. Environmental Protection Agency's Proposed Rule - "Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations" 84 Federal Register 10584 (March 21, 2019); EPA-HQ-OAR-2018-0775

Dear Administrator Wheeler:

As national environmental, conservation, and development organizations representing millions of members and supporters across the country, we respectfully submit these joint comments on the Environmental Protection Agency's (EPA) proposed rule - EPA-HQ-OAR-2018-0775 - "Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations" published in the Federal Register at 84 Fed. Reg. 10584 on March 21, 2019. Our members are deeply concerned with fighting global warming, protecting human health, promoting human rights, preserving natural habitats, halting deforestation, and advocating for clean energy.

We believe that policies designed to introduce more biofuels into the marketplace should be based not only on strong legal footing but also rigorous scientific analysis. Otherwise, public health, our environment, and climate will be put at risk.

The first purpose of the federal Clean Air Act is "to protect and ensure the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population."¹ Various provisions of the Act restrict the sale and use of fuels that contain a mixture of gasoline and ethanol, so as to protect against threat to human health and the environment.² As discussed below, the production and use of ethanol—especially ethanol made from corn starch—poses several such threats.

For more information on these impacts, please see a longer set of joint comments submitted to this docket from Clean Air Task Force, Earthjustice, National Wildlife Federation, and Sierra Club.

Proposed Waiver to Allow for Higher Fuel Volatility

EPA proposes to authorize the year-round sale and use of E15—a fuel blend containing gasoline and 15 percent ethanol—but to do so it must demonstrate that E15 conforms to the relevant statutory restrictions on gasoline-ethanol blends. The Agency first must show either that E15 complies with the limit that Congress set for gasoline volatility (9 pounds per square inch (psi) Reid Vapor Pressure (RVP)), or that E15 can take advantage of a 1 psi waiver that Congress created to accommodate the use of E10—a fuel blend containing gasoline and 10 percent ethanol. (The 1 psi waiver raises the volatility limit for "[f]or fuel blends containing gasoline and 10 percent denatured anhydrous ethanol" to 10 psi.³) In its proposed rule, EPA has not justifiably demonstrated either.

¹ CAA sec. 101(b)(1).

² See CAA secs. 211(f) and (h).

³ See CAA sec. 211(h)(4).

Section 211(h)(4) of the Clean Air Act makes the 1 psi waiver available to fuel “containing gasoline and 10 percent denatured anhydrous ethanol.” The meaning of that phrase is clear: it plainly refers to fuel that is a mixture of gasoline and 10 percent ethanol. EPA’s proposed new interpretation of the phrase—in which it would be read as meaning “containing gasoline and *at least* 10 percent denatured anhydrous ethanol”—contravenes the clearly expressed intent of Congress.

Moreover, the Clean Air Act prohibits the sale of E15 between June 1 and September 15⁴ (the “high ozone season”) for the purpose of limiting the formation of ozone, which is damaging to human health and the environment.⁵ Ozone forms in the troposphere when volatile organic compounds (VOCs) mix with nitrogen oxides (NOx) in the presence of sunlight. E15 has complicated bi-directional impacts on ozone formation: combusting E15 instead of E10 in an automobile engine may produce slightly less volatile organic compound (VOC) pollution but slightly more NOx pollution.⁶ In many parts of the United States, ozone formation is much more sensitive to changes in NOx levels than it is to changes in VOC levels. Consequently, the detrimental effects of a small increase in NOx emissions from the motor vehicle sector are likely to outweigh the beneficial effects of a small decrease in VOC emissions. EPA has not shown that increased E15 use due to its proposed rule would not result in additional NOx-related ozone formation.

EPA must implement the plain language of the statute and Congressional intent to protect public health and the environment.

Proposed Substantially Similar Determination

To justify its proposal to allow year-round E15 sales, EPA also must demonstrate either that E15 is “substantially similar” to a fuel used by EPA to certify light duty vehicles, or that the use of E15 will not cause or contribute to a failure of any emission control device or system—even during the high ozone season. EPA has not overcome these barriers.

First, EPA’s proposed “substantially similar” (“sub sim”) determination hinges on EPA’s flawed interpretation of CAA sec. 211(h)(4). If the 1 psi waiver cannot be used for E15 (which it cannot), then E15 cannot meet the 9 psi requirement established in CAA sec. 211(h)(1), and it does not matter if EPA determines that E15 is sub sim to any vehicle certification fuel. Second, a fuel that can cause a different set of problems than those caused by E10 when used during the high ozone season and is incompatible throughout the year with older, small, and off-road engines⁷ cannot be considered substantially similar to E10. For these reasons and in the absence of a fuller examination of the effect that increased E15 combustion would have on ozone levels, EPA does not provide reasoned explanation for its proposed determination that E15 is sub sim to E10.

To the second criterion, EPA determined in 2010/11 that Model Year 2001 and later vehicles running on E15 could only meet emissions standards when used during non-summertime months.⁸ EPA thus placed a prohibition on E15 use (specifically declining to provide E15 a 1 psi waiver that is now being proposed) during summer months to protect air quality and limit ozone pollution.⁹ EPA has pointed to no new

⁴ CAA sec. 211(h)(1).

⁵ See, e.g., EPA, Health Effects of Ozone Pollution (<https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>); EPA, Ecosystem Effects of Ozone Pollution (<https://www.epa.gov/ground-level-ozone-pollution/ecosystem-effects-ozone-pollution>).

⁶ EPA, Renewable Fuel Standard Program – Standards for 2019 and Biomass-Based Diesel Volume for 2020: Response to Comments (November 2018) (<https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0167-1387>).

⁷ See, e.g., 84 Fed. Reg. at 10602/3.

⁸ 75 Fed. Reg. 68096, 68120/1-2 (November 4, 2010); 76 Fed. Reg. 4663/3, 4665/2, 4675/1-2 (January 26, 2011).

⁹ *Id.*

information nor conducted any new vehicle testing that would justify reversing the Agency's past interpretation of the CAA.

Environmental and Other Impacts of Greater Corn Ethanol Production

EPA's proposal to expand the availability of E15 fails to acknowledge problems associated with increased production of corn ethanol – the biofuel that would most likely fill the expanded E15 market. The history of the Renewable Fuel Standard (RFS) and the realities of current/foreseeable biofuel production¹⁰ means that any E15-driven increase in ethanol consumption will drive more corn ethanol production. Corn ethanol is tied to several damaging impacts to the environment, including but not limited to: (1) significant, environmentally-damaging land use change,¹¹ (2) greater greenhouse gas emissions,¹² (3) commodity/food price impacts,¹³ and (4) negative impacts on soil, water, and wildlife habitat.¹⁴

Impacts on Small Engines and Older Vehicles and Associated Emissions

Finally, EPA's proposed rule does not adequately address how problems with E15's use in small engines and older vehicles can be avoided and/or mitigated. When incompatible engines are misfueled with E15, they may fail to meet their emissions standards,¹⁵ in addition to causing engine damage or even engine failure. In 2010/11, EPA issued partial waivers which found that E15 would not cause or contribute to a failure of any emission control device or system under certain conditions. While the introduction of E15 was thus allowed for the first time, the fuel was importantly prohibited in pre-Model Year 2001 vehicles and small and off-road engines,¹⁶ in addition to its use being prohibited during summer months.¹⁷ A misfueling

¹⁰ In 2018, corn ethanol accounted for 95% of the total volume of ethanol required to meet RFS mandates, with sugarcane ethanol, cellulosic liquid ethanol, and other advanced ethanol providing the remaining 5%. See 82 Fed. Reg. 58503/3, 58512/3, 58513/1 (December 12, 2017). As a result of these production trends, the RFS has become a de facto corn ethanol mandate. Thus, any new demand for ethanol associated with a policy change that allows year-round sales and use of E15 will be met, by and large, by increased corn ethanol production. See Jennifer Carrico, "Fueling Corn Demand?", *SeedWorld* (November 15, 2018) (<https://seedworld.com/fueling-corn-demand/>).

¹¹ See, e.g., Lark, *et al.* 2015. Cropland Expansion Outpaces Agricultural and Biofuel Policies in the United States. *Environmental Research Letters* 10(4): 1-11. DOI: 10.1088/1748-9326/10/4/044003 (<https://iopscience.iop.org/article/10.1088/1748-9326/10/4/044003/pdf>); EPA, *Biofuels and the Environment: Second Triennial Report to Congress* (hereafter "EPA Second Triennial Report") (2018) at 108-110 (https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=536328&Lab=IQ); Earthjustice and Clean Air Task Force, *Petition to US EPA to Amend its Aggregate Compliance Approach to the Definition of "Renewable Biomass" Under the Renewable Fuel Standard in Order to Prevent the Conversion of Native Grassland at 5* (October 30, 2018) (<https://earthjustice.org/sites/default/files/files/AggregateCompliancePetition.pdf>).

¹² See Lester Lave, *et al.* 2011. *Renewable Fuel Standard: Potential Economic and Environmental Effects of U.S. Biofuel Policy 221* (Report by the National Research Council Committee on Economic and Environmental Impacts of Increasing Biofuels Production) (internal citations omitted) (http://www.nap.edu/openbook.php?record_id=13105); Clean Air Task Force, *Corn Ethanol GHG Emissions Under Various RFS Implementation Scenarios* (2013) (<http://www.catf.us/resources/whitepapers/files/20130405-CATF%20White%20Paper-Corn%20GHG%20Emissions%20Under%20Various%20RFS%20Scenarios.pdf>).

¹³ International Food Policy Research Institute, *Biofuels and Food Security: Balancing Needs for Food, Feed, and Fuel* (2008) (<http://www.ifpri.org/publication/biofuels-and-food-security>); Chris Malins, *Thought for Food - A Review of the Interaction Between Biofuel Consumption and Food Markets* (2017) (https://www.transportenvironment.org/sites/te/files/publications/Cerulogy_Thought-for-food_September2017.pdf); T. Searchinger, *et al.* 2015. "Do Biofuel Policies Seek to Cut Emissions by Cutting Food?" *Science* DOI: 10.1126/science.1261221 (<https://science.sciencemag.org/content/347/6229/1420>).

¹⁴ EPA Second Triennial Report at 68-69, 71, 93-94; see comment letter submitted by Sierra Club on impacts to federally listed species and Endangered Species Act implications.

¹⁵ 84 Fed. Reg. at 10602/3.

¹⁶ 76 Fed. Reg. at 4664/1 (January 26, 2011).

¹⁷ 75 Fed. Reg. 68096, 68120/1-2 (November 4, 2010); 76 Fed. Reg. 4663/3, 4665/2, 4675/1-2 (January 26, 2011).

mitigation rule coupled with the 2010/11 waivers was intended to mitigate the use of E15 in incompatible engines.¹⁸

Despite this, EPA acknowledges that if E15 is found to be sub sim to E10, the E15 partial waivers would no longer be necessary, but the misfueling rule would still apply.¹⁹ EPA requests comment on whether it should impose similar restrictions on E15 use in small and older engines.²⁰ It undoubtedly should, as EPA acknowledges that no new data has become available that would warrant the use of E15 in these engines. Because misfueling with E15 causes higher emissions, harming public health and the environment, at a minimum, the restrictions that were in place in 2010/11 for the E15 waivers should remain, if not be strengthened to mitigate misfuelling.

Thank you for the opportunity to provide comments. We hope that our remarks provide useful guidance for EPA's final decision. We appreciate your consideration.

Respectfully submitted,

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¹⁸ 76 Fed. Reg. at 44406 (July 25, 2011).

¹⁹ 84 Fed. Reg. at 10593.

²⁰ *Id.* at 10603/2.