National Marine Manufacturers Association

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U.S. Environmental Protection Agency
EPA Docket Center
1200 Pennsylvania Ave., NW
Washington, DC 20460

RE: EPA-HQ-OAR-2017-0091
Comments Submitted Electronically

Administrator Pruitt:

The National Marine Manufacturers Association (NMMA) is pleased to provide the U.S. Environmental Protection Agency (EPA) with the following comments regarding the 2018 Standards for the Renewable Fuel Standard Program (EPA-HQ-OAR-2017-0091).

NMMA is the leading recreational marine industry trade association in North America, representing 1,400 boat, engine, and accessory manufacturers. NMMA members collectively produce more than 80 percent of the recreational marine products sold in the United States. Recreational boating is a significant driver of the country's economy, employing 650,000 people across more than 34,000 boating businesses, while contributing $121.5 billion in economic activity.

What's more, 142 million recreational boaters take to the water annually in the U.S., consuming about 2.1 billion gallons of gasoline. The proposed RVO levels for 2018 are deeply concerning to the recreational boating industry, due to the negative impact on marine engines, vessels, and consumers. Maintaining conventional ethanol volumes at 15 billion gallons, as the rule for 2018 proposes, will continue to flood the market with higher blends of ethanol without addressing looming issues including: the guaranteed availability of E10, consumer demand for E0, the need for robust education on E15 usage and impacts, and promoting alternatives like biobutanol.

NMMA and the North American recreational boating industry strongly oppose EPA's 2018 RVOs proposal. Finalizing this rule, as proposed, would deny consumers choice at the pump, while endangering their safety on the water. NMMA calls on the EPA to use its waiver use authority to adjust the 2018 RVOs to better serve all stakeholders, reflect consumer demand, and mitigate against misfueling.

Demand for E10 and E0

Marine engines are designed, calibrated, and certified by EPA to operate on blends of gasoline up to 10 percent ethanol by volume; while federally prohibited from operating on E15. NMMA members through the U.S. Department of Energy's Renewable Energy Laboratory have extensively studied the effects of E15 on marine engines. The results unequivocally show safety problems caused by significant engine damage, poor engine performance and difficulty starting.

The 2018 RVO proposal does nothing to guarantee the continued availability of E10, while billions of gallons of E15 would continue to enter the marketplace. Ninety-five percent of boaters fuel their boats at traditional gas stations. While NMMA does not support higher levels of ethanol in the

marketplace, we ask this Administration, at the very least, to mandate that when E15 is sold, E10 must also be available at retail gas stations. This would ensure access to appropriate fuel blends for boats and other off-road equipment.

Recreational boats are designed and built to last for decades. While newer engines are certified to operate on E10, a legacy fleet of over 16 million engines currently remain in operation. The fuel system and engine components are often jeopardized by the corrosive effects of ethanol. According to BoatUS, 90 percent of boaters prefer E0 over other alternatives[1]. A recent survey by the publication *Boating Industry*, also indicated that 92 percent of respondents have seen damage to boat engines caused by higher blends of ethanol[2].

Emissions and durability testing have compared E15 and E0, and examined exhaust emissions, exhaust gas temperature, torque, power, fuel flow and engine performance. Specifically, the testing showed degraded emissions performance outside of engine certification limits as well as increased fuel consumption[3]. In separate testing on engine durability, each tested engine showed deterioration, including two of the three outboard engines with damages severe enough to prevent them from completing the test cycle[4].

And while the EPA concurred with these findings, as evident by its prohibition against the use of E15 (and higher blends) in marine engines, the 2018 RVO proposal does nothing to truly address the marine engine market. In fact, the proposal fails to ensure that the industry's products have access to the fuel supply it needs and demands, while increasing the probability for misfueling with non-approved fuels.

While we appreciate EPA's acknowledgment that it underestimated the public's demand for E0 in its 2016 final rule, the current proposal still falls short of actual consumer demand. We urge this Administration to take into account market demand and consumer preference for E0 when finalizing overall volumes.

Additionally, EPA's E0 analysis continues to focus strictly on the marine engine sector, failing to take into account the millions of other engines prohibited to use mid and high level blends of ethanol. From motorcycles and all-terrain vehicles, to lawnmowers and generators, and to classic cars and snowmobiles, there is a significant market of engines that cannot use E15. Much like the consumer demand among boat owners for ethanol free options, the same is held true for these other groups as well. As such, EPA should amend the proposal to more accurately reflect market conditions when setting the 2018 RVOs.

Failure to adjust the E0 supply will interfere with market demand and deny consumer choice at the pump.

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[1] http://www.boatus.com/pressroom/release.asp?id=1140#.WZ7dTyiGM2w

[2] http://boatingindustry.com/features/2017/07/12/ethanol-still-a-significant-challenge-survey-says/

[3] https://www.nmma.org/assets/cabinets/Cabinet515/Volvo%20Penta%20engines%20and%20E15%20NREL%20Report.pdf

[4] https://www.nmma.org/assets/cabinets/Cabinet515/Mercury%20Engines%20and%20E15%20NREL%20Report.pdf

Misfueling Mitigation Plan (MMP) concerns

The recreational boating industry continues to have concerns over the EPA's Misfueling Mitigation Plan (MMP), which fails to adequately educate boaters and off-road product users regarding the effects and proper usage of E15. A 2016 Harris Poll found that only 31 percent of Americans understand that higher blends of ethanol can be harmful to small engines[5]. Even more troubling, 60 percent of Americans assume that any gas that is sold at a gas station must be safe for all engines. The current pump label is severely inadequate and more robust outreach must be done for the safety of our consumers and consumer products.

EPA acknowledged this concern in the November 2015 final rulemaking, and stated the agency's willingness to work with "industry, other private stakeholders, and our government partners." However, to date, EPA has not reached out to NMMA on such a project, nor has it reached out to any other stakeholder group with similar concerns. Furthermore, the current proposal fails to discuss any such concern. The word "misfueling" only appears once in the entire proposed rule and there is no substantive mention of potential engine damage or the MMP.

We would like to remind the EPA that an enhanced, government-led public awareness campaign is not unprecedented. In the 1970s, the EPA transitioned the country to unleaded fuels through a combination of educational initiatives that greatly went beyond a pump label. The recreational boating industry believes that the further proliferation of E15 is akin to the introduction of unleaded gasoline and thus merits a greater government-led public awareness effort.

Overall, the MMP is lacking and ineffective. Fuel pump labeling should not be the sole consumer outreach method. Research has proven that labels are not an effective method to warn the public. According to the Association for Consumer Research, warning labels do not influence consumers' perceptions of hazards and risks, and the research went on to find that this lack of influence is exasperated when such warning labels are applied to commonly-used products, such as a gas pump. This is reaffirmed by recent research that showed while 92 percent of consumers notice the price at a pump, only 50 percent notice warning labels and just 24 percent notice ethanol content[6]. At a minimum, fuel pump labeling should be held in conjunction with broader outreach campaigns, as was the original intent of the EPA.

NMMA also supports the implementation of physical applications that prevent misfueling, such as nozzle size differentials. Physical applications would significantly reduce the risk of misfueling, and reduce retailer liability as discussed by the Society of Independent Gasoline Marketers of America (SIGMA) and the National Association of Convenience Stores (NACS).

Beginning in 2011, EPA instructed stakeholders to "develop a broad public education and outreach campaign that provides both consumers and retailers with the information they need to avoid misfueling." NMMA heeded this request, working with other stakeholder groups to develop and promote educational outreach efforts. Notably the "Look Before You Pump" campaign, conducted in partnership with the Outdoor Power Equipment Institute, and through distribution of "No E15" labels to recreational boat and engine manufacturers. NMMA has also educated its member companies and

[5] http://opei.org/new-nationwide-poll-finds-increased-mis-fueling-of-engines-despite-awareness-of-ethanol-in-gasoline/

[6] http://opei.org/new-opei-survey-shows-education-sorely-lacking-on-higher-ethanol-fuel-blends/

worked with industry partners to raise consumer awareness. We have partnered with safety/certification organizations, state boating associations and national groups like BoatUS and the American Sportfishing Association.

EPA's failure to develop a true MMP will lead to unintended and potentially dangerous, consequences. As discussed previously, E15 and other higher blends of ethanol have the potential to cause significant engine damage; such usage will void warranties, and could result in expensive repair bills, and/or distress on the water.

NMMA calls on the EPA to adhere to their pledge to work with all parties to develop a better and more effective MMP.

Biobutanol

Increasing the amount of ethanol in the gasoline supply through higher RVOs is not the only pathway to achieve the objectives of the Renewable Fuel Standard. The recreational boating industry has been a leader in exploring next-generation biofuels and while our main concern with the RVO proposal focuses on the potential growth of E15 and problems associated with it, we would be remiss if we didn't take the opportunity to discuss biobutanol, a viable alternative that is already available. Biobutanol can be produced from corn or other biomass, contains 30 percent more energy than ethanol, and behaves more similarly to conventional gasoline compared to ethanol.

Over the last seven years, the marine industry has conducted extensive tests on biobutanol, and has endorsed it for use in marine engines at up to 16.1 volume percent in gasoline. Biobutanol produced no more emissions than pure EPA-approved certification test fuel and did not result in any boat fuel system, engine, or emissions failures throughout the years-long evaluation period.

The Department of Energy has designated biobutanol as a "drop-in fuel," meaning it can be used to displace petroleum under the Energy Independence and Security Act of 2007, and increasing its use could help reduce greenhouse-gas emissions. In June of 2015, engine manufacturers from across the recreational boating industry announced their endorsement of biobutanol as a suitable and safe alternative biofuel[7]. Furthermore, the marine industry approval for biobutanol fuel blends has helped lead to multiple biobutanol fueling stations across the U.S., providing an immediately accessible biofuel choice for consumers.

The recreational marine industry's proactive collaborative biobutanol program is a profound example of an industry working together to find meaningful solutions to enable a viable next-generation biofuel.

The EPA should seriously consider this science-based success story and reduce the regulatory constraints associated with expanding biobutanol availability by:

- **Approving biobutanol at 16.1 volume percent under section 211(f) of the Clean Air Act for on-highway use**. This change would allow for streamlined regulatory approval of 16.1 volume percent biobutanol in gasoline (3.5 O_2 wt.%) for on-highway use.

[7] *Recreational Boating Industry Turning to Biobutanol as Alternative Biofuel* http://www.nmma.org/press/article/19947

- **Temporarily classifying biobutanol made from corn starch as an advanced D5 biofuel**. This would incentivize biobutanol production (through higher RIN values) without providing government subsidies that were afforded to ethanol producers who built the ethanol industry.

- **Not approving a 1 pound RVP waiver for E15 fuels**. An approval of the 1 pound waiver request would significantly devalue the environmental and industry benefits of biobutanol and would result in a severely unbalanced playing field between ethanol and biobutanol producers.

The government supported ethanol production through years of incentives such as low interest loans, agricultural incentives, tax credits and subsidies for every gallon of ethanol produced. The aforementioned policy changes for biobutanol will not require government funding, but will immediately support the growth of a proven and accepted biofuel alternative to ethanol. Increasing the amount of ethanol in the gasoline supply through higher RVOs is not the only pathway to achieve the objectives of the Renewable Fuel Standard. EPA should recognize biobutanol, the science-based research, and subsequent endorsement by recreational marine engine manufacturers proving its viability as a next-generation biofuel.

Conclusion

In summary, NMMA opposes the EPA's 2018 RVO proposal. This proposed rule endangers millions of boat owners by denying them choice at the pump, and imposes an excess supply of mid and high level blends of ethanol on the market without sufficient education and guaranteed access to safe and approved fuel blends. If E15 or higher blends become the common marketplace fuel, misfueling will occur and engines will be damaged, and the American consumer will be stuck paying the bill for an outdated government policy. In absence of a more workable rule, one that takes into consideration these real concerns, NMMA strongly urges the EPA to utilize its waiver authority and amend the proposal to reflect actual market conditions.

Thank you for the opportunity to provide comments. If you have any questions about our priorities or would like more information, please do not hesitate to contact me at nvasilaros@nmma.org, 202-737-9763 or Mike Pasko (NMMA's Director of Federal Government Affairs) at mpasko@nmma.org, 202-737-9760.

Sincerely,

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