National Marine Manufacturers Association

June 25, 2018

The Honorable Donald J. Trump
The White House
1600 Pennsylvania, Ave., NW
Washington, DC 20500

On behalf of the National Marine Manufacturers Association (NMMA), we would like to express our position regarding the concept of replacing the Renewable Fuel Standard (RFS) with a new national octane standard.

We are pleased that Members of Congress and your Administration are considering replacing the broken RFS with a new fuel neutral program. However, our industry and America's recreational boaters have a number of priorities that need to be considered and addressed in order to ensure a new octane standard is not detrimental for our industry.

By way of background, 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.

142 million recreational boaters take to the water annually in the U.S., consuming about 2.1 billion gallons of gasoline. The nation's fuel policy is extremely important to our industry and America's boaters, and we have been engaged in current discussions on Capitol Hill regarding a new octane standard that could be set between a 95-98 Research Octane Number (RON).

Marine engines do not have any performance or safety problems running on high octane fuels, such as a 95-98 RON. However, if the higher octane is achieved via higher ethanol additives into gasoline (above 10 percent) then the recreational boating industry would face the same problems with the new program as we do today with the RFS. Congress and your Administration would simply be replacing one broken program with another. However, if some additional considerations can be taken into account we believe that a new national octane standard could be better than the current RFS program and beneficial for all stakeholders.

Problems with the Current RFS Program

Marine engines are designed, calibrated, and certified by EPA to operate on blends of gasoline up to 10 percent ethanol by volume; while being 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 illustrate safety problems caused by significant engine damage, poor engine performance and difficulty starting. 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.

Ninety-five percent of boaters fuel their boats at traditional gas stations on land. And as more E15 has entered the marketplace, boaters have become confused as to what is acceptable and not acceptable to put in their tank.

Our industry is very troubled by your recent comments regarding expanding the sale of E15 into the summer months. This is currently prohibited because of the negative impacts it would cause on air quality. The boating industry believes that expanding E15 sales into the summer boating season would mean that more consumers would misfuel.

Current misfueling mitigation efforts by EPA are woefully inadequate. When people fill up at a gas station, they pay attention to one main item: price. While most of the public understands the difference in regular and premium gasoline, they likely don't know the difference between E10 and E15, and why one can be put into a boat while the other cannot.

Misfueling Mitigation

A 95-98 RON can be achieved by adding a number of different additives into gasoline (ie: aromatics, ethanol, bio-isobutanol, etc.) Gas pumps currently list an Anti-Knock Index (AKI) rating and transitioning to a RON gas pump label will be a consumer-facing change.

Under a new high octane standard, a gas station might sell 95 RON gasoline that is comprised of a mix of ethanol (at E10) and other aromatics. However, a neighboring gas station might sell 95 RON gasoline that is comprised of purely E15. This scenario could be quite unclear to the consumer who likely wouldn't know that a 95 RON gasoline at one station is acceptable for their boat, while at another station the 95 RON gasoline is not acceptable since it is E15.

If a 95-98 RON is achieved with blends of ethanol above 10 percent, your Administration and Congress need to carefully consider how the gasoline will be marketed to the consumer. Some gasoline retailers currently market E15 as "Unleaded 88", which adds to consumer confusion.

If our country pivots to the new high octane standard, there must be clearer labeling, stricter marketing rules, and additional safeguards at the gas pump. In short, the misfueling mitigation efforts for a new octane standard need to be far superior than the current RFS program.

Cost to the Consumer

Increasing octane also increases cost. We have concerns regarding the impacts on the cost to the consumer for being forced to pay for a more expensive fuel. We recognize that we are not alone

in these concerns, and a phased-in approach will be needed to ensure that consumers can bear the additional expense. However, the marine industry is also unique in this regard.

While marine engines can run on high octane gasoline, they aren't specifically calibrated to reap the energy benefits of such a fuel. This means that boaters could be forced to pay a higher price to fill their tanks, but not receive the same efficiencies as vehicles.

Availability of E0 and E10

Since ethanol is the cheapest form of increasing octane, there needs to be a guarantee that consumers will still be able to access E10 and E0.

Wherever a high octane blend containing E15 is sold, a high octane blend that contains E10 should also be available. This would ensure consumers have access to appropriate fuel blends for their boat.

Additionally, 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 a survey by BoatUS, 90 percent of boaters prefer E0 over other alternatives. The new high octane policy needs to take into account consumer preference for E0 and ensure its availability.

Bio-isobutanol

NMMA recognizes that ethanol is a low-cost form of increasing octane. However, another additive can also serve as a great octane booster: bio-isobutanol.

Bio-isobutanol 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 eight years, the marine industry has conducted extensive tests on bio-isobutanol, and has endorsed it for use in marine engines at up to 16.1 volume percent in gasoline. Bio-isobutanol 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 bio-isobutanol 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 bio-isobutanol as a suitable and safe alternative biofuel. Furthermore, the marine industry approval for bio-isobutanol fuel blends has helped lead to multiple bio-isobutanol fueling stations across the U.S., providing an immediately accessible biofuel choice for consumers.

Bio-isobutanol is significantly more resistant to phase separation than ethanol. It is also less corrosive to fuel system component materials such as fuel tanks, fuel hoses, primer bulbs, gaskets and o-rings compared to ethanol. Lack of phase separation and low solvency means that bio-isobutanol could be transported in the existing pipeline distribution infrastructure, minimizing the need for truck and rail transportation, which is required for ethanol. When added to gasoline, bio-isobutanol lowers the Reid Vapor Pressure (RVP) of the finished gasoline blend which results in lower evaporative emissions and allows for a less costly gasoline blend stock.

Most recently, EPA approved bio-isobutanol at 16.1 volume percent for on-highway use. NMMA strongly supported this approval and believes that it will help ensure that consumers have access to a safe and reliable E15 alternative. We applaud your Administration for these efforts.

If our country transitions to a new national octane standard, we believe that bio-isobutanol can play an important role in helping to achieve a higher octane.

However, regulatory barriers for bio-isobutanol commercialization exist and further actions are needed.

Current EPA rules do not allow bio-isobutanol blended gasoline to be mixed into a tank that previously held ethanol unless the tank is completely emptied. This is a practical issue that significantly hinders access to retail markets because it requires new tanks or makes it impossible for a retailer to transition away from ethanol blended gasoline to bio-isobutanol.

Any gasoline blendstock created for the purposes of blending with ethanol also works with bio-isobutanol. EPA currently requires that potential oxygenate blendstocks be listed on the "Product Transfer Document" (PTD) sent from the refinery. The problem is that even if one refiner listed bio-isobutanol as a blendstock, and the blendstock was put not a common tank that serves multiple refiners, then none of the blendstock can be blended with bio-isobutanol. This is because the other refiners have no incentive to list bio-isobutanol on the PTDs. Under the current rules, this means that separate tankage and infrastructure needs to be set up, creating an extra cost.

Finally, bio-isobutanol has superior properties with potential to deliver great value to the supply chain, retail, and consumers. As long as the RFS remains intact, access to advanced D5 RINs would be beneficial for incentivizing bio-isobutanol production.

According to EPA, each gallon of bio-isobutanol would receive 1.3x the number of RINS compared to a gallon of ethanol, because of bio-isobutanol higher energy density. So, the potential exists to make more advanced RINS available with a smaller number of gallons. This is good news for everyone in the supply chain.

Conclusion

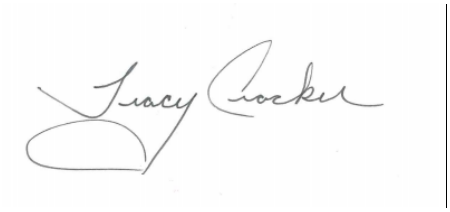
The recreational boating community remains open to the concept of a new national octane standard. However, in order for it to be successful for all stakeholders your Administration and

Congress need to ensure that misfueling mitigation efforts are stronger than under the current RFS program, E15 sales aren't expanded into the summer boating season, costs to the consumer are phased-in and minimized, availability of E10 and E0 is guaranteed, and regulatory barriers to bio-isobutanol are removed.

Additionally, while our letter specifically addresses the concept of a new high octane standard as it impacts the recreational boating industry, many other groups likely have similar concerns, including manufacturers and users of: small engines such a lawn mowers, chain saws, snowmobiles, motorcycles, and classic cars.

If you have any questions about our priorities or would like more information, please do not hesitate to contact Nicole Vasilaros (NMMA's Senior Vice President of Government Affairs) nvasilaros@nmma.org at 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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