



July 19, 2013

Mr. Todd J. Teske, President, Chairman & CEO, Briggs & Stratton Corporation  
One page summary

Five reasons why EPA should revisit its conditional certification of E-15:

1. Research has shown, and EPA has agreed, that use of E15 in small non-road engines can have harmful and costly consequences on small engines and outdoor power equipment.
2. Research on warning label effectiveness suggests that an E-15 warning label will do very little to mitigate misfueling.
3. Behavioral studies of customers at the gas pump conclude that consumers overwhelmingly favor the lowest priced option, regardless of the consequences.
4. Misfueling due to lack of education to consumers regarding the proper use of E-15 will be significant.
5. The use of Biofuels or “drop-in fuels” has been tested and could prevent misfueling.

If public policy requires that the federal government drive the market for alternative fuels, Briggs & Stratton urges that the policy be amended to more fully support the development and use of biofuels, from any feedstock, which are intended for use as “drop-in fuels” which provide a safe fuel for both legacy and newly manufactured small engines and outdoor power equipment.

At a minimum we recommend that the reform legislation rescind the partial waiver for E15, and establish gasoline blended with up to 10% ethanol as the general purpose domestic fuel. The legislation should also require that all considerations to increase domestic biofuel levels in the future be subject to a formal EPA rulemaking whereby the market’s ability to safely distribute, retail and consume such fuel is provided for.



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Written Testimony of Mr. Todd J. Teske, President, Chairman & CEO, Briggs & Stratton Corporation

Chairman Whitfield, Ranking Member Rush, Congressman Barrow and distinguished Members of the Committee, thank you for soliciting Briggs & Stratton's perspective on the issues raised by the EPA's implementation of the Renewable Fuels Standard. I have been extremely impressed by the Committee's workmanlike approach to educate itself, and the public, on the challenge which the RFS presents to manufacturers, consumers and the environment. The Outdoor Power Equipment Institute, on which I currently serve as Chairman, has submitted formal comments in response to the Committee's white papers. My statement, which is submitted strictly in my capacity as Chairman and CEO of Briggs & Stratton, will attempt to define that challenge as it pertains to small engine manufacturers and offer suggestions on how to protect consumers from significant economic and environmental damage.

Briggs & Stratton Corporation, which is headquartered in Milwaukee, Wisconsin, is the world's largest producer of gasoline engines for outdoor power equipment. We are a leading designer, manufacturer and marketer of pressure washers, generators, lawn and garden, turf care and other power equipment through its Briggs & Stratton, Simplicity®, Snapper®, Ferris®, Murray®, Branco® and Victa® brands. Briggs & Stratton products are designed, manufactured, marketed and serviced in over 100 countries by 6,200 employees. Approximately 5,300 of those employees work here in the United States. As a U.S. based manufacturer, our company is proud to be



celebrating its 105<sup>th</sup> anniversary this year and continues to manufacture over 85% of its products here in America.

Briggs & Stratton's long standing commitment to the environment remains a key focus for our business. We continue to manufacture our products with recycled materials that are highly efficient and with reduced emissions. Since 1995, we have reduced our emissions by 75% and, after completing the phase in of our new product offering, will achieve an additional 35% reduction in those emissions by January, 2014. In 2007, we signed a pledge with the Department of Energy to reduce our energy consumption by 25% over 10 years. Just 6 years later, we have already cut our consumption by 20%. These are just a few of the many examples that demonstrate our commitment to the environment.

Below are five factors justifying rescission of EPA's conditional certification of E-15 :

**1. Research has shown, and EPA has agreed, that use of E15 in small non-road engines can have harmful and costly consequences on small engines and outdoor power equipment.**

Briggs & Stratton has conducted extensive testing on levels of ethanol above 10%. Increasing levels of ethanol in gasoline result in increased levels of alcohol. Alcohol has inherent properties that cause issues with our engines and they become more acute with increasing alcohol content. Increasing the alcohol in fuel changes the air-fuel ratio (enleanment) in our carbureted engines. E-15 fuel, by definition would have an alcohol content ranging from 0 to 15%. Our engines would have great difficulty in meeting both emissions and performance expectations with this type of alcohol range. Enleanment will also result in higher operating temperatures that will lower engine



life due to issues such as valve sealing, piston scoring, and head gasket leakage, just to name a few. Ethanol is also hygroscopic (absorbs water). Increased levels of water will cause the engine to run poorly, and will also cause corrosion by means of acidic attack, galvanic activity, and chemical interaction. Ethanol will also cause other problems such as reduced fuel storage life, starting issues and reduced fuel economy.

The Department of Energy (DOE) also conducted testing. After testing E-15 on a representative sample of small non-road engines, including Briggs & Stratton powered generators and power washers, the DOE found that small engines experienced a variety of difficulties with intermediate blends of ethanol. Most engines performed worse in several metrics when running on higher ethanol blends – engines often had higher operating temperatures, higher exhaust temperatures, and NOx emission rates. Higher operating temperatures, lead to increased wear and tear and more frequent maintenance. Moreover, 7 out of the 11 engines behaved “poorly” or “erratically”, according to DOE’s report, with incidents of unstable speeds, stalling, and clutch engagement at idle. As a result of this testing, small engines were specifically excluded by EPA from the E-15 Waiver.

**2. Research on warning label effectiveness suggests that an E-15 warning label will do very little to mitigate misfueling.**

In response to our concerns and the concerns of other interested parties, EPA has issued a mandatory warning label for pumps that distribute E-15. Given the body of research on the effectiveness of warning labels, we believe that this warning will not prevent consumers from misfueling their engines with the E-15 blend, and, with no one else liable, will leave the



equipment owner liable for the damage to their products. Warning labels have been the subject of many research studies, with results often showing little change in consumer behavior. To address this concern, there are standards and testing protocol that have been completed. The Association for Consumer Research further reports that warning labels are considerably less likely to be successful when applied to products that consumers use frequently and feel comfortable with, e.g. gas pumps. If consumers visit their local gas station and do not realize that the ethanol blend has been increased, this research would indicate that they are unlikely to heed the warning label on the pump. There has been no testing done by EPA to validate the effectiveness of the warning label, which is not consistent with recognized safety standards such as ANSI.

When the U.S. transitioned from leaded gasoline to unleaded gasoline in the 70s and 80's, new cars running on unleaded gasoline were designed with different fuel tanks to be incompatible with older leaded gasoline in an effort to prevent misfueling. There is no such "transition" plan or tangible differentiation in place for E-15 and it is solely up to the consumer to know what fuel is appropriate for their automobile, lawn mower, generator, pressure washer, etc.

**3. Behavioral studies of customers at the gas pump conclude that consumers overwhelmingly favor the lowest priced option, regardless of the consequences.**

Historical evidence suggests that when faced with a range of prices at the pump, consumers are far more likely to choose the lowest-priced option despite potential damages to their engines. As previously mentioned, when the United States transitioned from leaded gasoline to unleaded gasoline in the 70's and 80's, new cars running on unleaded gasoline were designed with different fuel tanks, to be incompatible with older leaded gasoline pumps. Additionally, car buyers were



educated at the point of purchase about the new fuel. Even with those prevention and education measures, the EPA reported that in 1983 – ten years after the introduction of unleaded gasoline – misfueling rates remained as high as 15.5%. The New York Times reported that “customers would go out of their way to pump leaded gas if it was just a few cents cheaper. What they gain at the pump they lose at the repair shop in higher maintenance costs.” If high rates of misfueling still occurred when physical obstacles were in place, we believe that a simple warning label next to the pump will not yield better results. Similarly, the National Bureau of Economic Research reports very strong price elasticity of demand in its own study on the use of premium vs. regular gasoline during times of high gasoline prices. When gasoline prices increased, consumers switched to less expensive, regular gasoline even though premium gasoline was recommended for their vehicles. NBER concludes that households are nearly 20 times more sensitive to the income effect for gasoline than to equivalent effects from other sources.

**4. Misfueling due to lack of education to consumers regarding the proper use of E-15 will be significant.**

EPA has 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.”

Briggs & Stratton is already taking steps to educate its customers about proper fueling for its products and has introduced additives and E-0 gasoline products to assist consumers with selecting the proper fuel. Briggs & Stratton does not feel it, nor the outdoor power, equipment industry, should be held solely responsible for educating tens of millions of Americans of the dangers of misfueling, especially when many already own products which are incompatible with E-15. In a recent study, AAA found that 95% of Americans had not heard of the new E-15 waiver. In a



separate study by the National Association of Convenience Stores, it was clear that consumers were confused by E-15; many believed that E-15 had higher fuel economy than E-10. And the study also found that of participants who said they would consider fueling their cars with E-15, 60% of them owned cars for which E-15 is incompatible and prohibited. Despite our best efforts at education and prevention, we believe the risk of misfueling will be substantial, and damage to our products will be irreversible. We risk losing decades of trust and our brand reputation as a manufacturer of quality, reliable products while owners will not get the value they expected when they purchased the product.

**5. The use of Biofuels or “drop-in fuels” has been tested and could prevent misfueling.**

Small engines and outdoor power equipment are not designed, warranted, or EPA-approved to operate on gasoline containing more than 10% ethanol. Briggs & Stratton fully supports the development and use of biofuels, from any feedstock, which are “drop-in fuels”. Drop in fuels, by definition, meet existing gasoline specifications and are ready to “drop-in” to infrastructure, minimizing compatibility issues. These fuels are capable of satisfying the additional growth in biofuel use, while also providing a safe and highly performing general fuel for both legacy and newly manufactured small engines and outdoor power equipment. We have conducted extensive testing with a drop-in isobutanol blended gasoline which demonstrated evidence that such fuels can provide the performance and operational criteria necessary, without demonstrating any negative effects. Drop in fuels had not yet materialized when the RFS was developed in previous market conditions and the EPA was compelled to grant the partial waiver to meet the statutory targets using ethanol. E-15 will not provide compliance with current RFS targets and will require EPA to continue to revise fuel standards creating uncertainty in the marketplace and for



manufacturers and increasing misfueling risks to consumers. Misfueling will result in economic harm to all parties and void product warranties. Ever changing targets will result in less efficient investment of manufacturing resources and more costly products.

### **Briggs & Stratton Corporation's request to the committee**

For the past three years we have worked closely with our Congressman, Jim Sensenbrenner, in an effort to rescind the certification of E-15 until such time as the National Academy of Science can convene a peer review panel to evaluate EPA's action and recommend alternative approaches which protect consumers and the environment. Briggs & Stratton urges this Committee to work in a bi-partisan, bi-cameral manner to pass reform legislation through revisions to the RFS which will align domestic goals for biofuel use with the market's ability to produce, distribute and consume such fuels. At a minimum we recommend that the reform legislation rescind the partial waiver for E-15, and establish gasoline blended with up to 10% ethanol as the general purpose domestic fuel. The legislation should also require that all considerations to increase domestic biofuel levels in the future be subject to a formal EPA rulemaking whereby the market's ability to safely distribute, retail and consume such fuel is provided for.