

January 26, 2024

Transmitted via electronic submission

## **Re: OPEI Testimony in Opposition to VA HB 644 – Relating to Banning Gas-Powered Leaf Blowers**

The Outdoor Power Equipment Institute (“OPEI”) opposes VA HB 644 which will provide that any locality may regulate the use of gas-powered leaf blowers. VA HB 644 will negatively impact OPEI members and hardworking professionals throughout Virginia.

The Outdoor Power Equipment Institute (“OPEI”) is an international trade association representing more than 100 manufacturers and their suppliers of *both* gas- and electric-powered outdoor power equipment. OPEI member products are ubiquitous in American households and businesses. Outdoor power equipment such as lawnmowers, trimmers, chain saws, leaf blowers and generators are the lifeblood of millions of hardworking landscape and construction professionals, many of whom are sole proprietors, and emergency responders. See Annex A – Outdoor Power Equipment Facts.

*The outdoor power equipment industry is a leader in the deployment of electric equipment, with electric products dating back more than 70 years.* Recent advancements in battery technology have accelerated electric product growth for many categories. In fact, the majority of “handheld” products shipped *are already* electric powered. Electric “handheld” leaf blowers represented almost 90% of all handheld leaf blowers shipped in 2023. Residential electric walk-behind mower shipments have ballooned from just 5% of total walk-behind lawnmowers in 2014 to nearly 50% in 2023. These trends will continue without legislative action. VA HB 644 is unnecessary.

However, due to the wide range of lawn and garden equipment types and use cases, *there is currently no one-size-fits-all power-source approach.* Codes and bills that propose gas-powered equipment bans and dictate equipment purchase choices ignore technical feasibility challenges, particularly for landscape and construction professionals, emergency response workers, and rural small engine powered equipment users. Supply chain, electrical grid infrastructure, and product transportation also present significant concerns.

Finally, 40 CFR Part 1074.110(b), codified in 2009, specifically prohibits states (other than California) *and localities* from adopting or enforcing *any* standard or other requirement applicable to the emissions from spark-ignition engines smaller than 50 horsepower. The legislature’s oversight of this code results in VA HB 644 and the incorrectly concluding that the state or its municipalities can set emissions bans on gas-

powered leaf blowers – it cannot. The Clean Air Act, under protection of the Supremacy Clause of the U.S. Constitution, reserves this authority solely for the U.S. Environmental Protection Agency (EPA).

### **Zero Emissions Equipment Technology Feasibility Challenges**

Today's battery technology is not without limitations. In its recent Small Off-Road Engine rulemaking the California Air Resources Board (CARB) compared on-line (marketing) performance of a gas-powered and electric-powered blower. However, industry testing shows that the battery-powered unit's performance<sup>1</sup> dropped more than 40% as the battery discharged. In "turbo" mode the battery lasted just 18 minutes. On the other hand, the gas-powered equipment maintained full performance for over an hour, on a single tank of gas.

Performance and run time differences raise significant concerns for landscape and construction professionals, emergency respondents and rural large property owners who demand steady, reliable and continuous performance.

Consideration must also be given to the availability of power in many instances when / where outdoor power equipment is used. For example, grass trimmers and blowers are often used off-the-grid and in emergency response situations which require continuous power.

### **Zero Emissions Equipment Cost Challenges**

The number and cost of batteries needed for high-use applications such as professional landscaping and construction are additional concerns. CARB's survey and modeling data estimates that the average landscaper professional that owns walk-behind mowers, string trimmers, leaf blowers and chain saws require on average 13170 W of power *per day*. The average landscape professional would require *dozens* of high-power batteries *every day to achieve California's average landscaper modeled power demand*, resulting in thousands of dollars in upfront battery cost. Additionally, based on CARB performance modeling, batteries would need to be replaced approximately every 3 years for these applications, resulting in thousands of dollars in on-going battery "maintenance" costs and additional product lifecycle carbon emissions.

Additionally, many businesses would also incur upfront costs to safely charge and transport the number of high-powered batteries required to operate daily. In fact, some landscape and construction professionals don't even have access to power to safely and securely recharge equipment in storage yards where equipment is kept overnight.

Small businesses, many of which are low income and minority owned, would be hit hardest by the unaccounted for and/or unanticipated costs of the proposed legislation. California reported that 86% of landscaping businesses in the state are sole-proprietors

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<sup>1</sup> Measured as air volume (cfm) and blower force (N) in accordance to ANSI/OPEI B175.2 standard.

and are predominantly minority-owned.<sup>2</sup> OPEI believes these industry trends are similar across the country.

### **Emissions Are Already Federally Regulated**

Emissions are a common discussion point surrounding lawn and garden equipment. “Facts” comparing outdoor power equipment emissions to automobiles are not rooted in sound data and are untrue or misleading.

Many believe outdoor power equipment are unregulated, high-emitting sources of exhaust gas emissions. This is not true. The OPE industry has a long history of working cooperatively with the U.S. EPA to develop a regulatory framework which has driven low and zero-emissions technology solutions in outdoor power equipment for over three decades. Today, the EPA is on its third phase of pollutant controls for small engine-powered equipment, resulting in up to 90% reductions in exhaust gas and evaporative emissions from previously unregulated machines.

Industry is committed to advancing emission reduction technologies. In fact, numerous gas-powered equipment models, including *many* popular lawnmower and leaf blower options are certified *well* below federal standards – and *well* below “fact sheet” comparisons. Lawnmowers and many leaf blowers are now powered by efficient four-stroke engines. “Traditional” two-stroke engines have been replaced by more efficient stratified charge technology and/or include catalysts to reduce exhaust gas emissions. As a result of federal small spark-ignited engine regulations the EPA estimated the US “lawn and garden equipment” fleet smog forming emissions would be reduced by 20 to 30 percent from 2011 to 2018 – And EPA has *yet* to accurately account for recent and projected electric product market growth when estimating sector emissions<sup>3</sup>. Electric product growth will continue to drive additional reductions well beyond agency estimates.

Finally, additional study is needed to understand the lifecycle carbon emissions for gas-versus battery-powered equipment considering the size and potential number of batteries needed for electric equipment to match CARB’s modeled runtime, performance and durability/life. CARB provided no such analysis in its rulemaking.

### **The U.S. EPA Has Sole Jurisdiction for Small Engine Emission Regulations**

Manufacturers of outdoor power equipment cannot build, and dealers and retailers cannot stock and sell specialized, niche products for each individual city or state. Consequently, Federal law requires that states comply with one set of emission

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<sup>2</sup> California State University Fullerton, Social Science Research Center, *Survey of Small Off-Road Engines Operating within California Results from Surveys with Four Statewide Populations*, Table 178 (May 15, 2019). Additionally, CARB’s “*LandscaperSurvey\_FinalDataset*” shows that 58 percent of sole-proprietor landscapers surveyed were non-white, of which 50 percent were Hispanic/Latino.

<sup>3</sup> U.S. Environmental Protection Agency, EPA-420-R-18-010, *Nonroad Engine Population Growth Estimates in MOVES2014b*, Section 5.2, General Comments from Robert F. Sawyer, pg. 17 (July 2018), “*RESPONSE: MOVES does not currently account for the relatively small fraction of nonroad equipment powered by electricity. EPA recognizes that electricity as a fuel for nonroad mobile sources is growing in market share, and that this penetration will need to be addressed in future versions of MOVES.*”

standards. In doing so, the federal Clean Air Act (CAA) Section 209(e) (42 U.S.C. Section 7401), the U.S. Environmental Protection Agency's (EPA's) implementing regulations, and 40 C.F.R. Part 1074.110(b), prohibit states or any political subdivisions thereof from adopting or attempting to enforce any standard or other requirement applicable to spark ignition engines smaller than 50 horsepower. In short, EPA could not approve the waiver of preemption required under Section 209(e) to allow Virginia or its municipalities to set unique or adopt separate emission standards or requirements for small-engine powered lawn and garden equipment.

**A Robust Enforcement Program is Necessary**

A robust enforcement program for the draft regulation will be necessary to ensure fairness to compliant manufacturers, retailers, and end-users. Resources will be needed at state and local levels to assure compliance with and to enforce the proposed ban. Amid a patchwork quilt of state regulations, such an enforcement and compliance program will undoubtedly be cost and resource intensive, and in OPEI's opinion unworkable.

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For these reasons, OPEI opposes VA HB 644 allowing municipalities to ban gas-powered leaf blowers.

Please do not hesitate to contact us directly if you have questions or require additional information regarding these concerns.

Respectfully submitted,

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## **ANNEX A – Outdoor Power Equipment Facts**

### **The Outdoor Power Equipment Industry is a Leader in Power Technology and Innovation:**

- The outdoor power equipment (OPE) industry has been manufacturing electric-powered equipment for more than 70 years.
- Electric equipment is a top driver of OPE demand and future industry growth.
- In 2023 shipped products were predominantly battery-electric powered:
  - 65% of lawn and garden OPE shipped were electric;
  - 73% of handheld products shipped were electric;
  - 47% of walk-behind mowers shipped were electric – Up from 5% in 2014.
- OPEI members are focused on growing the electric market through innovation, especially for landscape, construction and emergency respondent needs.
- However, there is currently no “one-size-fits-all” option for the wide portfolio of OPE products and uses.
  - There is wide range OPE products – Electric power source options do not exist for all categories of equipment.
  - Electric equipment is widely accepted for residential lawn and garden applications, however, further advancements are necessary for electric equipment to deliver the performance needed and a cost competitive with gas-powered equipment in many commercial applications.

### **OPEI and Industry Overview:**

- OPEI represents 110 industry manufacturers – Most original equipment manufacturers produce *both* gas and electric-powered equipment.
- OPEI members and their suppliers contribute \$16B to the U.S. GDP annually.
- OPE manufacturers employ 150,000 U.S. workers.
- The industry provides tools for a national network of nearly 8M landscape and construction professionals, many of which are sole proprietors.
- OPE is ubiquitous in American households and businesses, with an estimated 40M products sold annually and a total in-service fleet exceeding 250 million.
- OPEI members have a long history of consumer safety and environmental protection through standards development and government engagement.

### **OPE Industry Principles on ZEE Policymaking**

- A patchwork quilt approach by state / municipality is unworkable for original equipment manufacturers and will result in market disruptions.
- The U.S. EPA retains sole jurisdiction over OPE emission regulations.
- Government should rely on sound, real-world data and science for equipment policy, with particular focus on:
  - The wide range of outdoor power equipment in the market
  - Various user types and respective performance needs
  - Product and infrastructure (both government and business) related costs
  - Supply chain challenges
  - Manufacturing, disposal and waste impacts of different technologies