



BRIGGS & STRATTON, LLC

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California Air Resources Board

Monitoring & Laboratory Division

1001 I Street

Sacramento, CA 95814

Re: Briggs & Stratton's comments regarding the potential amendments presented by California Air Resources Board ("CARB") staff to be considered at December 9, 2021, public hearing

Dear Ms. Chang, Ms. Singh, Mr. Dilbeck, and Ms. Fibiger,

Briggs & Stratton, the leading American small engine manufacturer, submits these comments to the recently announced changes to CARB's proposed amendments to the Small Off-Road Engine ("SORE") Regulations Transition to Zero Emissions. Briggs & Stratton is a member of the Outdoor Power Equipment Institute ("OPEI") and the Engine Manufacturers Association ("EMA") and supports the EMA Proposal submitted to CARB on November 29, 2021. Given the impracticability of the SORE Transition to Zero Emissions proposed amendments on the SORE manufacturing industry and commercial applications of SORE equipment, Briggs & Stratton is submitting these brief comments to highlight some of the proposed amendments' more problematic aspects.

Briggs & Stratton shares CARB's goal of reducing emissions from SORE sources and supports electrification of SORE-operated applications, but CARB's proposed amendments to be considered at the December 9, 2021, public hearing are untenable and would be catastrophic to the myriad individuals and industries that use SORE-operated products. The amendments arbitrarily and capriciously dictate a moratorium on technology that provides crucial support to countless facets of American industry and life by dictating what types of technology Briggs & Stratton and other industry participants must use in order to sell products in California. The proposed amendments will substantially increase costs for consumers and businesses, limit consumer choice, and have a catastrophic impact on the industries that rely on SORE-powered commercial equipment.

1. CARB's Inventory Model Does Not Reflect True SORE Emissions

CARB's estimated SORE population is based on fundamentally flawed and inadequate data from a survey conducted on CARB's behalf by California State University – Fullerton (CSUF) to support the update to



CARB's SORE Emissions Inventory and Model. More specifically, CARB contracted with CSUF to conduct a "phone survey" to update the SORE emissions inventory and model in 2017. CARB staff selected a phone survey with the supposed objective of obtaining "real world" data, rather than expanding on CARB's previously-conducted field study, which actually metered equipment usage, in order to obtain a larger in-use data set.

Reviewing just one example illustrates the problem with the survey. Respondent 555's improbable responses were largely ignored by staff, but those responses had a significant impact on the survey results. This respondent's total equipment usage defied reality, reporting greater than 9 hours per day for 365 days per year. This respondent also originally answered the survey as being a single male living in a mobile home with no landscapable area. However, the data generated from this response drove an increase in riding tractor usage from 29 hours/year in the OFFROAD2007 model to 83 hours/year in the CARBSORE 2020 Model.

Air Improvement Resources (AIR), jointly contracted by OPEI and EMA, reviewed the data collection process and quality assurance / quality control ("QA/QC") process conducted to support this rulemaking. Through this review, AIR identified multiple issues that call into question the reliability of the survey, including deviations from the CARB/CSUF contract relating to QA/QC procedures and insufficient response rates. The CARB 2020 SORE Emissions Inventory and Model is further flawed because it continues to use data points from equipment that was manufactured between 1973 and 1995 to support claims of diurnal and running loss emissions. Additionally, CARB staff has failed to evaluate the effectiveness of the latest amendment package approved by OAL on November 13, 2017, for which CARB has not received a waiver from US EPA to enforce as required by the Clean Air Act. The Inventory and Model also does not account for a reduced turnover (or "scrappage" rate) or for the loss of potential emissions reductions (or "leakage") due to increased out-of-state purchases, which will occur due to the increased product costs in California that will result from the Proposed SORE Amendments.

2. CARB's Proposed Amendments Are Currently Impracticable for Commercial Applications

Briggs & Stratton shares CARB's goal of reducing emissions and is actively developing technology and products to achieve those goals. However, CARB's proposed Transition to Zero Emissions amendments are based on an infeasible timeline that is divorced from the reality of the state of technology. As CARB's own data demonstrate, the commercial landscaping industry is heavily reliant on gasoline-powered SOREs. To ban the sale of these engines so abruptly would be disastrous to this industry for a number of reasons.

This is not the first time regulatory ambition for the adoption of zero emissions equipment collided with the reality of the technology available in the market. CARB first promulgated zero emission vehicle ("ZEV") requirements in 1990 regulations. See 13 CCR § 1960.1. However, we are now more than 30 years later, and battery powered vehicles are only beginning to gain significant market share. This has necessitated numerous amendments to the ZEV regulations as CARB's ZEV regulatory goals were misaligned with the reality of technology in the market. The proposed Transition to Zero Emissions amendments are another example of CARB's ambitions extending past the current technological landscape.

For a significant portion of the market, the currently available electrical equipment is impracticable as replacements for gasoline-powered SORE commercial applications. Commercial landscapers must use their equipment continuously throughout the day each day. The downtime necessitated by charging electrical



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equipment would prevent continuous operation, which would lead to fewer jobs completed, less revenue, and reduced employment in California. Further, even if electrical equipment were to be used in commercial applications, the power to charge that equipment must come from somewhere. It is likely that the only portable source of electric charging would be diesel- or gasoline-powered generators, which would themselves then contribute to emissions in California.

Replacement electric-powered applications for certain gasoline-powered SORE applications simply do not exist at this time. If a commercial landscaper's zero turn radius mower (ZTR) were to irreparably fail in early 2024, after the proposed amendments are promulgated, there would be no sufficient electric replacement available. Even if a reasonably comparable electric ZTR were to come to market by 2024, the electric ZTR would likely be so much more expensive than the gasoline-powered SORE application that this replacement would present a great financial strain on the business, even relative to the already significant investment in new machinery. At that point, the only two options for the landscaper would be either to reduce the size of her business, cutting jobs in California, or to purchase a ZTR from out of state and bring it into California. The out of state ZTR brought into California would not be subject to any CARB requirements and would actually result in greater emissions in California than had the landscaper been able to replace its ZTR with a CARB-certified gasoline-powered ZTR, which would have been certified to lower emissions requirements than an out of state ZTR otherwise would.

Briggs & Stratton has routinely demonstrated our commitment to reducing exhaust emissions in the past by investing in innovative technologies. Briggs & Stratton is not opposed to the goal of CARB's proposed Transition to Zero Emissions amendments to the SORE regulations. Briggs & Stratton acknowledges that CARB is tasked with the significant challenge of reducing emissions to meet the State Implementation Plan (SIP) in order to address non-attainment with the Clean Air Act. This is why Briggs & Stratton has tailored this letter and our request to commercial applications. Demonstrating both the industry's inability to transition to electrification at this time and Briggs & Stratton's respect for CARB's Transition to Zero Emissions program, Briggs & Stratton supports the EMA Proposal to mandate residential walk-behind lawn mowers sold in California be electric-powered. Abandoning SORE-powered walk-behind lawnmowers in California will cost Briggs & Stratton 150,000 to 200,000 sales per year. Walk-behind lawn mowers are one of the largest volume applications in the SORE category and a key part of Briggs & Stratton's current and historic business. However, SORE-powered **commercial** applications cannot be eliminated without massive detriment not only to SORE producers but to Californians who rely on these applications to make a living.

3. Commercial Gasoline-Powered SORE Applications Require a Phase-In Period

Rather than a full ban on commercial gasoline-powered SORE applications, as proposed, this equipment requires a phase-in period. CARB has already recognized that a phase-in period is required for certain equipment, as it has specifically provided that portable generators would not be subject to the same Zero Emissions requirements as immediately as other SORE applications. Under the proposed amendments, generator emission standards would be more stringent than the existing emissions standards starting MY2024, but they would not be zero. The zero emissions standards would then apply to generators in a second phase starting in MY2028.

A similar phase-in schedule for commercial SORE applications would strike an appropriate and necessary balance between CARB's goals and the present technological landscape. CARB should identify a



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similar level of reduction for commercial SORE applications for MY2025 as has been set for generators, which will accomplish CARB's goal of reducing emissions from SORE-powered equipment. A required reduction without a ban would reduce emissions in California while giving industry time to innovate and develop cost effective alternatives for SORE-powered machinery used for commercial purposes.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John E. L. Booher".

John E. L. Booher
Vice President, Legal, Compliance & Governmental Affairs