



Joani Woelfel
President & CEO
2020 Research Park Dr., Suite 160
Davis, CA 95618
P: 530.564.7125 | 800.576.8850



Representing agricultural, industrial, material handling, hardware, lumber, outdoor power and rental equipment dealers in Arizona, California, Colorado, Hawaii, Nevada, Utah and Wyoming

December 9, 2021

Clerks' Office
California Air Resources Board
1001 I Street, Sacramento, California 95814

Via Electronic Submittal: <https://www.arb.ca.gov/lispub/comm/bclist.php>

RE: Proposed Amendments to the Small Off-Road Engine Regulations: Transition to Zero Emissions, Initial Statement of Reason (ISOR) published October 12, 2021

Far West Equipment Dealers Association (FWEDA) represents agricultural, industrial, material handling, hardware, lumber, outdoor power and rental equipment dealers across seven Western States including California where our office is located in Davis. California dealership locations comprise hundreds of businesses whose contributions provide thousands of quality jobs and enhance a healthy economy.

FWEDA supports efforts to improve air quality and the health and well-being of our citizens and has worked tirelessly across our territory to defeat illegal tampering legislation advanced by "right-to-repair" advocates who seek unrestricted access to software in machinery that would override emissions and safety controls.

On behalf of California equipment dealers, FWEDA shares serious concerns about the ban on new sales of gas-powered small off-road engines (SORE) starting in 2024 or whenever the California Air Resources Board (CARB) determines feasible. The regulations CARB proposes are neither technologically feasible nor cost effective under this timeline. These rules will have damaging impacts on the many businesses that equipment dealers serve in California, and therefore will have a significant negative impact on our stakeholders.

FWEDA concurs with the Outdoor Power Equipment Institute (OPEI), National Association of Landscape Professionals (NALP), the Truck & Engine Manufacturers Association (EMA), the Portable Generators Manufacturers' Association (PGMA), the California Landscape Contractors Association (CLCA) and many others in urging the CARB board to delay implementation of the staff proposal.

FWEDA endorses an amendment to the ISOR to delay implementation of the transition to "zero emissions equipment" (ZEE) SOLELY for commercial/professional grade small off-road engines (SORE) until model year 2028 or later for the reasons outlined below. This would provide a responsible transition that mitigates the negative financial impact on the small off-road engine sector including the turf and landscape industry. *(Bullet points below refer to attached References.)*

- Equipment Dealers [report significant supply chain disruptions](#) that extend up to two years in filling orders placed now, which impacts all sectors of our industry. Manufacturers are also notifying dealers of inflationary prices increases, which in some cases are substantial. There has also been a misunderstanding related to the performance of residential vs. commercial equipment. As noted by NALP, a **“low adoption rate is not due to an unwillingness to use ZEE equivalents but rather evidence that the equipment is not technologically capable to be the exclusive equipment used by commercial landscape companies at this time.”** The absence of sufficient technology to support the proposed amendments will hamper the ability of dealers to perform in this sector. First responders also require high-performing gas-powered equipment that these amendments seek to eliminate. While exempting this equipment from these rules could address the concern, the specialized use and expected volume of equipment sold would not be sufficient for dealers to keep in inventory if the sales were banned across the sector.
- CARB estimates there are 29.3 million pieces of lawn/garden and other outdoor power equipment across the state with 12.8 million of these using gasoline as their power source. It is estimated there are 55,000 landscape businesses in the state. Given that a single landscaper could require a minimum of 35 batteries per day to do their job, ***the estimated minimum number of batteries landscapers would use daily is nearly 2 million. Once the transition to ZEE is complete, it would total upwards of 12 million batteries (single use) at a minimum for each piece of equipment.*** The reality is significantly more.

The volume of batteries a dealer would need to keep in inventory poses significant and unrealistic logistical, safety and environmental concerns. These demands would be compounded for dealers who offer rental or loaner equipment. The shop infrastructure cost for dealers and outdoor power equipment users associated with additional battery charging and safety is also considerable. There are also performance considerations for batteries in the summer months when heat degrades the charge.

- The maintenance, storage and disposal of batteries is a significant concern. The handling and disposal of batteries becomes a dealer liability and expense. The staff report acknowledges that compliance includes increased demand for lithium batteries and disposal of batteries would be subject to compliance with existing laws and regulations governing solid waste, such as California’s Universal Waste Rule 88 (Cal. Code Regs., tit. 22, Chapter 23). “That is, disposal of used batteries into landfills is prohibited; however, they could be refurbished or re-used. To meet an increased demand of refurbishing or reusing batteries, new facilities, or modifications to existing facilities, are anticipated to accommodate battery recycling activities. Equipment replacement may result in recycling or selling old equipment.”

FWEDA is unaware of any assessment or formal plan that would accommodate this volume and turnover of batteries, gas-powered equipment retired from use, and ZEE’s shorter life cycle, and found no provisions for how the dramatic increase in equipment and battery disposal would be sustained starting in 2024 when the proposed rules would take effect. Dealers will also assume liability and repercussions for illegal consumer disposal of dead batteries.

- Lithium prices soar as demand increases: <https://www.mining.com/lithium-prices-continue-to-soar-up-88-in-2021/> driving up the cost of transitioning to ZEE. While the Biden administration acknowledges it intentionally drove up gas prices across the nation to justify promoting an escalated transition to “zero-emissions” and its “climate change” goals, the reality is that small and medium businesses that FWEDA dealers serve cannot sustain these increased costs at this pace. Hundreds of California business owners and others affected by these regulations are among the 700 comments submitted for CARB’s Dec. 9, 2021, hearing, pleading with CARB and state officials not to put them out of business or drive up their cost of doing business, which is exactly what these regulations will do.
- How will the state’s policy address SORE dealer inventory over the next two years as it attempts to eliminate gas-powered equipment during the transition? What does a dealer with inventory of thousands of pieces of gas-powered equipment and parts do if they can’t sell it by 2024?
- Businesses that use SORE also use other commercial equipment and vehicles regulated by CARB’s onerous mandates (LSI, fleets, ACT, etc.) with estimated upfront costs for other equipment, batteries and charging infrastructure exceeding the purchase and operating costs to replace gas-powered equipment within its limited life cycle. Additionally, charging infrastructure is largely substandard. Business will be required to install various input voltages to manage different types of equipment charging, yet another increase in the cost of doing business, in addition to accommodating existing gas-powered equipment needs.
- Contrary to CARB’s representations that these rules would have no impact on business competition, California has seen a similar dynamic illustrated by CARB’s 2021 Agricultural Emissions Inventory report showing the agricultural sector lost 22,000 small/medium farms over 10 years through 2017. Larger growing operations are justified for grant funding and better equipped to afford Tier 3 and above agricultural equipment, which represents a significant increase in pricing. CARB cheers the loss of these small and medium businesses as a victory for emissions reductions. Outdoor power equipment businesses will face a similar fate that pushes consolidation if CARB’s proposal is implemented.
- Currently, there is no comprehensive strategy to add SORE, large-spark ignition (LSI), large off-road equipment, personal combustion-engine vehicles and gas-powered fleets to California’s power grid in the next 2-3 years as CARB endeavors to do. Given the findings of California power outages last year (<http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>) acknowledging the lack and absence of power generation, infrastructure and storage to sustain what is already in use, it’s inconceivable 1) to add millions more units to the power grid, and 2) to have no formal plan to do it. The report illustrates the push for all electric is infeasible without sufficient energy resources into the grids that will sustain any meaningful support of the expected demand. And while CARB and the state may argue there will be incentives like the FARMER program, [funding for these incentives is chronically uncertain due to politics](#).

Cleaner fuel technologies are not represented in the cost/benefit reward: [No equipment or vehicle is “zero-emissions”](#) as life cycle costs produce emissions throughout manufacturing, transport, marketing and sales

to end users illustrate. Advancing a narrative that “ZEE” is the only option is misleading. Additionally, research from the Public Policy Institute of California in 2020 shows jobs affected by this proposal [are among the hardest hit by the mass exodus](#) from the state over the past few years.

The equipment industry has led reduced and zero-emissions adoption by example, with large-scale development and adoption of reduced and zero-emissions equipment, when and where feasible. FWEDA members worked in good faith with CARB toward its initiatives to accomplish stated goals to reduce emissions (2016 SIP) and now the state is moving the goalposts.

FWEDA urges CARB to engage with industry to develop an emissions reduction strategy that allows the continued sales of SORE equipment in California until manufacturing, performance, economic and recycling challenges of lower-emission alternatives are resolved.

We also join other stakeholders in urging the CARB board to postpone action on the proposed amendments to further consider expert recommendations in making this transition, and to incorporate an amendment to the ISOR to delay implementation of the transition to “zero emissions equipment” (ZEE) SOLELY for commercial/professional grade small off-road engines (SORE) until model year 2028 or later.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jani Wolf". The signature is fluid and cursive, with a large initial 'J' and 'W'.

President & CEO
Far West Equipment Dealers Association

REFERENCES

- 1) **ARB – SORE – 16MLD011 Full Report Final 11-26-19**, pg 552, Table 440. Populations and upper and lower bounds of SORE equipment types from all sources in California, pg 553 Table 441. Populations and upper and lower bounds of gasoline powered SORE equipment from all sources in California
- 2) **OPEI comments to CARB**, : “For the average landscaper operating walk-behind mowers, string trimmers, leaf blowers and hedge trimmers, based on the CSU-F survey equipment distribution and SORE2020 suggested use factors, using conservative estimates of battery size, the average landscaper would require *36.68 batteries per day*. If chain saws are included with the average landscaper equipment, they would require *48.17 batteries per day*. Walk-behind lawn mowers would require 8 batteries per day, string trimmers would require 5.05 batteries per day, leaf blowers would require 18.34 batteries per day, hedge trimmers would require 5.28 batteries per day, and chain saws would require 12.5 batteries per day.”

“ ... conservatively, the average landscaper would require *36.68 batteries to 48.17 batteries per day*. Considering replacement batteries, which are not considered in the Proposed Rule, an average landscaper could conservatively use 84.32 to 103.37 batteries over the useful life (6 years) of the equipment. The *total cost of batteries and chargers* for the average landscaper set-up could cost \$18,000 to \$22,000 over a six-year product useful life. It is important to note that these calculations do not account for equipment costs nor do they account for battery or motor efficiency losses. Battery and motor efficiency losses would likely result in additional batteries and costs. It does not appear the Proposed Rule accounted for efficiency when estimating battery needs.”

- 3) **EMA Comments CARB Proposed Amendments to the Small Off-Road Engine Regulations, November 29, 2021**: “The scope of the proposed SORE Amendments has expanded well beyond what was described in the 2016 State SIP Strategy as the next-tier mitigation measure for SORE. Instead, what staff are now proposing amounts to an overly-aggressive interpretation, not of the underlying 2016 State SIP Strategy, but rather of the Governor’s recent Executive Order directing the transition of off-road mobile sources in California to zero emissions by 2035 – a goal that CARB proposes to accelerate by more than a decade in this case, to 2024 for all SORE except portable generators. Moreover, staff are proposing to mandate that dramatically accelerated transition to zero-emission equipment without having undertaken the necessary analysis of the technical feasibility and cost effectiveness of doing so. As a result, the pending proposal is neither reasonable nor implementable.”
- 4) **NALP**: CARB relied upon a survey conducted by California State University of Fullerton (CSUF) to compile a large portion of their data. Within this survey it was concluded that only 3 percent of chain saws, 3.5 percent of lawn mowers, 0.3 percent of riding mowers, and 5.9 percent of

trimmers used by professional landscape companies in California are ZEE, compared to over 50 percent for residential homeowners. ***This low adoption rate is not due to an unwillingness to use ZEE equivalents but rather evidence that the equipment is not technologically capable to be the exclusive equipment used by commercial landscape companies at this time.***

- 5) **CLCA:** “The landscape industry in California is a \$9 billion industry annually with more than 55,000 companies employing over 133,000 employees; 99 percent of these businesses are considered small businesses and a vital industry for entrepreneurs throughout the state of California, many of which are Latino or minority owned. CLCA continues to hear from landscape professionals about ZEE landscape equipment: The power is just not comparable; Impossible to use exclusively on large scale commercial jobs like HOAs, resorts, business parks and other public and commercial green spaces; Requires too many batteries to conduct their job function in an efficient manner; Charging issues in the field and in the workshop; Durability concerns; Batteries are too heavy; Cannot mow slopes on riding mowers because of the weight issue; Mow times are longer, and batteries cannot last a full workday; Leaf removal during seasonal changes is very difficult; Debris removal to mitigate fire spread is significantly more difficult; Shortage of dealers and maintenance shops to support transition; Batteries are not interchangeable between brands.”
- 6) **PGMA:** Spark-ignited portable generators are used primarily for emergency home backup power, unlike other SORE equipment and zero emission generators, which are used primarily for discretionary activities. The proposed amendments are not technologically feasible nor cost-effective because zero emission generators do not perform the same functions as spark-ignited portable generators and are more expensive. The two-step phase out of spark-ignited portable generators will hamper the transition to zero-emission portable generators because it could divert the resources needed to develop effective and affordable zero emission technology.