

Case Nos. 25-881, 25-1481

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**IN THE UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT**

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Outdoor Power Equipment Institute et al.,  
*Petitioners,*

v.

U.S. Environmental Protection Agency et al.,  
*Respondents.*

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On Petitions for Review from the Environmental Protection Agency  
Nos. EPA-HQ-OAR-2023-0151, EPA-HQ-OAR-2023-0292

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**BRIEF FOR THE CLEANING EQUIPMENT TRADE ASSOCIATION,  
THE NORTH AMERICAN EQUIPMENT DEALERS ASSOCIATION,  
AND THE AMERICAN RENTAL ASSOCIATION AS *AMICI CURIAE*  
SUPPORTING PETITIONERS**

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Dated: February 10, 2026

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## **INTEREST OF THE *AMICI CURIAE***

The Cleaning Equipment Trade Association (CETA) is an international, non-profit trade association that represents manufacturers, distributors, and service providers of commercial and industrial cleaning equipment, including products powered by small off-road internal combustion engines. CETA members manufacture, supply, and use essential equipment for sanitation, disaster response, industrial cleaning, municipal operations, and commercial maintenance. California is an important market for CETA members, and California regulations materially impact product availability, service networks, capital planning, and compliance burdens for CETA members.

The North American Equipment Dealers Association (NAEDA) is a trade association representing approximately 3,500 farm, industrial, and outdoor power equipment dealers. NAEDA's dealer members are independent businesses that provide a wide range of equipment and other products for retail sale to customers. In California, NAEDA has 56 members that operate across dozens of dealer locations across the State. Through selling equipment and parts, and servicing equipment, NAEDA's dealer members work in partnership with a variety of end users including farmers, ranchers, construction companies, landscapers, utilities, and state and local

agencies across California. The industry is a vital contributor to California's economy. Equipment dealers account for over 6,000 direct jobs in the State of California and generate over \$1 billion in economic activity annually.

The American Rental Association (ARA) is the international trade association for owners of equipment rental operations and manufacturers and suppliers of rental outdoor power equipment. The ARA has over 5,700 members across the world, with over 400 members in California. Many of the ARA's members also are dealers for manufacturers of outdoor power equipment. As the principal trade association for the equipment rental industry, the ARA's membership includes more than 13,000 rental locations and more than 1,000 manufacturers and suppliers, with locations in all 50 U.S. states and in more than 30 countries. In California, the ARA has over 1,000 rental locations. In 2024, the equipment rental industry created over 41,000 new jobs in the State of California and over 665,000 jobs across the United States, and generated over \$17.5 billion in economic activity in California and over \$205 billion in the United States.

*Amici* and their members submit this brief to explain that the Environmental Protection Agency's (EPA) authorization of 2016 and 2021 amendments to the California Air Resources Board's (CARB) small off-road

engine regulations (SORE Rule) is not consistent with the Clean Air Act.<sup>1</sup> The SORE Rule imposes a zero-emission requirement on small off-road engines that takes effect for most products starting in the 2024 model year and takes effect for commercial pressure washers in the 2028 model year. CARB failed to adequately consider the technological infeasibility of manufacturing compliant equipment on those timelines; the immense costs for manufacturers, dealers, and users when compliant equipment is unavailable for the California market; and the potential safety risks of the rule. EPA violated the Clean Air Act when it authorized the SORE Rule notwithstanding those errors. Further, the SORE Rule, if permitted to stand, will wreak havoc on the industries in which *amici* participate and ultimately will harm the public.

## INTRODUCTION AND SUMMARY OF ARGUMENT

*Amici* are committed to protecting the environment. To that end, *amici* and their members work with federal, state, and local governments to enact laws and policies that improve air quality while allowing industry

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<sup>1</sup> Pursuant to Federal Rule of Appellate Procedure 29(a)(2), *amici* state that all parties have consented to the filing of this brief. Pursuant to Rule 29(a)(4)(E), *amici* affirm that no counsel for a party authored this brief in whole or in part and that no person other than *amici* and their counsel made a monetary contribution to its preparation or submission.

to manufacture and sell equipment to meet the needs of their governmental and non-governmental customers. CARB's SORE Rule disregards that careful balance, and EPA's authorization of the rule thus is not consistent with the Clean Air Act.

EPA cannot authorize a California air quality standard unless that standard is technologically feasible and accounts for the costs of compliance, and EPA gives appropriate consideration to safety concerns. EPA ignored these limitations when it authorized the SORE Rule's zero-emission requirements.

First, EPA authorized the SORE Rule even though manufacturing zero-emission equipment by the effective date is not technologically feasible, as the administrative record demonstrates. Commercial pressure washers exemplify the technological feasibility problem. Commercial pressure washers are specialized equipment that must meet three specifications: generating sufficient water pressure and flow to produce the force needed to remove graffiti, grime, and pollutants; heating water to disinfect surfaces; and providing enough power for use in remote areas over extended periods. These capabilities are necessary for commercial pressure washers to meet the needs of end users, including for important public-interest functions such as removing invasive plants from firefighting equipment and cleaning,

sanitizing, and disinfecting parks and other outdoor municipal locations. No technology currently exists that can perform these functions and also meet the SORE Rule's zero-emission standard.

Second, EPA should not have authorized the SORE Rule because it does not adequately account for the cost of compliance in two important respects. CARB and EPA did not accurately calculate the cost for manufacturers to make compliant products. Rather, EPA endorsed CARB's rudimentary analysis of the cost of the rule for consumers, which simply compared retail prices for compliant and non-compliant products and treated it as a reasonable alternative method to determine the total cost to manufacturers. Even that limited analysis was flawed, as CARB severely underestimated the price of compliant products.

Further, that analysis was limited to the cost of production. But the SORE Rule regulates manufacturers and dealers alike, which are required by California law to provide maintenance on small off-road engines. Specifically, the SORE Rule does not remove the regulatory requirement for manufacturers and dealers to service equipment already in the market that contains small off-road engines that do not meet the zero-emission standard. Yet the rule prohibits manufacturers and dealers from building the inventory of internal-combustion engines necessary to do so. That will

place manufacturers and dealers in a no-win situation where they are required to service equipment but lack the components to do so, reducing their servicing and maintenance revenue.

Third, the SORE Rule risks serious safety hazards. Commercial pressure washers and other equipment with small off-road engines often must be used in remote locations that are subject to extreme temperatures. Using battery-operated equipment in those conditions—which the SORE Rule would essentially mandate—would create a serious fire risk because extended battery use to power commercial pressure washers can result in overheating of the battery, which can trigger thermal runaway that can result in ignition of the battery and lead to explosions or fires.

The consequences of the SORE Rule will be significant for both regulated industry and the public. Due to the technological infeasibility of compliant products, the rule will significantly reduce revenue for manufacturers and dealers, many of which will be forced to make difficult decisions about employee retention. For smaller manufacturers and dealers, the reduction in revenue may be existential. Further, the rule will harm the public because both governmental and non-governmental users of products with small off-road engines will no longer be able to provide essential services. In the case of commercial pressure washers, those services include

controlling the spread of invasive species and cleaning, sanitizing, and disinfecting parks and other outdoor municipal locations. The Court should grant the petitions, find the SORE waiver violates the Clean Air Act, and vacate EPA’s authorization of the SORE Rule.

## ARGUMENT

### I. THE SORE RULE IS NOT CONSISTENT WITH THE CLEAN AIR ACT

Congress enacted the Clean Air Act to “divide[] regulatory authority between the states and the federal government.” *Nat’l Ass’n of Home Builders v. San Joaquin Valley Unified Air Pollution Control Dist.*, 627 F.3d 730, 733 (9th Cir. 2010). The Act “gives the EPA significant national oversight power over air quality standards, to be exercised pursuant to statutory specifications.” *Mont. Sulphur & Chem. Co. v. EPA*, 666 F.3d 1174, 1181 (9th Cir. 2012). Under the Clean Air Act, “[t]he direct regulation of emissions from stationary sources”—such as buildings like power plants, 42 U.S.C. § 7411(a)(3)—“is primarily left to the states.” *Jensen Fam. Farms, Inc. v. Monterey Bay Unified Air Pollution Control Dist.*, 644 F.3d 934, 938 (9th Cir. 2011). In contrast, “the federal government sets nationwide emissions standards for mobile sources,” *id.*, including nonroad vehicles and engines.

Given the federal government’s primacy over emissions from mobile sources, states generally are prohibited from enacting emissions standards for nonroad engines. Section 7543(e) of the Clean Air Act prohibits states from “adopt[ing] or attempt[ing] to enforce any standard or other requirement relating to the control of emissions from . . . new nonroad engines” in certain construction and farm equipment and locomotives. 42 U.S.C. § 7543(e)(1). Further, with the exception of California, no state may independently seek authorization from EPA to adopt and enforce emissions standards for any other nonroad engines. *See id.* § 7543(e)(2).

Section 7543(e) does contemplate a limited role for California to adopt emissions standards in nonroad engines. For certain nonroad engines, EPA “shall, after notice and opportunity for public hearing, authorize California to adopt and enforce standards and other requirements relating to the control of emissions from such . . . engines,” but only “if California determines that California standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards.” 42 U.S.C. § 7543(e)(2)(A). Significantly, EPA “shall [not] grant[]” “such authorization” if it finds that “the determination of California is arbitrary and capricious,” “California does not need such California standards to meet compelling and extraordinary conditions,” or “California standards and

accompanying enforcement procedures are not consistent with” Section 7543. *Id.*

EPA has long taken the position that a California standard concerning nonroad engines is “consistent with” Section 7543 only if it adheres to the same requirements in the Clean Air Act that apply when EPA promulgates emissions standards for motor vehicles and engines. 59 Fed. Reg. 36969, 36983 (July 20, 1994) (“EPA believes that it should review nonroad authorization requests under the same ‘consistency’ criterion that it reviews motor vehicle waiver requests.”). One such statutory precondition is that a standard cannot take effect until “after such period . . . necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.” 42 U.S.C. § 7521(a)(2); *see id.* § 7543(b)(1)(C). This requirement is not discretionary.

Further, EPA must determine whether a standard proposed by California creates safety risks. Specifically, EPA must “give appropriate consideration to safety factors (including the potential increased risk of burn or fire) associated with compliance with the California standard” before “authoriz[ing] the state to adopt or enforce standards” for smaller nonroad engines. 40 C.F.R. § 1074.105(c).

By authorizing California to adopt the SORE Rule, EPA has imposed a zero-emission standard on all new small off-road engines sold in California. For those small off-road engines, the SORE Rule takes effect for 2024 model-year products. 1-ER-3; *see* 13 Cal. Code Regs. § 2403. For a subset of engines—including engines for pressure washers with displacements of 225 cubic centimeters or greater—the rule takes effect for 2028 model-year products. 1-ER-3; *see* 13 Cal. Code Regs. § 2403.

*Amici* submit this brief to emphasize three key respects in which EPA’s authorization of the SORE Rule is flawed. First, as exemplified by commercial pressure washers, the imposition of a zero-emission standard on the timeline contemplated in the SORE Rule is not technologically feasible for commercial-grade products with small off-road engines. Further, CARB did not give appropriate consideration to the cost of compliance for manufacturers and dealers. Finally, the SORE Rule’s zero-emissions standard also poses serious safety hazards that EPA did not appropriately consider when it authorized the rule.

**A. Manufacturing Compliant Commercial Pressure Washers On The SORE Rule’s Timeline Is Not Technologically Feasible**

The SORE Rule imposes a zero-emission standard on all small off-road engines. In adopting this standard, CARB set different compliance

deadlines for engines from different products. The first deadline, which applies to most regulated engines, requires compliance for 2024 model-year products. *See* 1-ER-39. The second deadline, which applies to engines for several products including commercial pressure washers, requires compliance for 2028 model-year products. 1-ER-40. Manufacturers must design, market, and source components for a given model year well in advance and typically begin production for that model year during the previous calendar year. 4-ER-649, 5-ER-966.

The 2028 model-year compliance deadline for commercial pressure washers exemplifies the infeasibility of developing and applying the requisite technology. In adopting the 2028 model-year deadline, CARB acknowledged “that additional time is necessary for manufacturers to develop and implement zero-emission technology” for certain products. Supplemental Comments from CARB to EPA 2 (May 8, 2024), <https://perma.cc/TK7G-RVBU> (CARB May 8, 2024 Comments) (cited at 1-ER-40 & n.86). Yet CARB reasoned that “[n]o issues of technical feasibility arise with these standards because the technology needed to produce zero-emitting, lower power rated pressure washers currently exists” since “zero emitting pressure washers . . . are currently commercially available.” 1-ER-40.

EPA relied on these findings when it authorized the SORE Rule. Parroting CARB's conclusion, EPA stated that "the required technology is already commercially available," even though it recognized that "product availability is still catching up for some of the specialized products." 1-ER-40, 1-ER-53. In an attempt to reconcile these positions, EPA placed significant weight on CARB's "policy choice that effects a change in the sale of new equipment [that] will, over time, shift end users from spark-ignition SORE" to zero-emission equipment even though those two products "[o]perationally . . . differ[] in significant respects." 1-ER-50.

In reaching this conclusion, EPA brushed aside technological feasibility issues with the compliance deadlines for the SORE Rule and instead reasoned in the abstract that compliant technology could be developed. OPEI's brief discusses the lack of record support for EPA's conclusion that adequate zero-emissions equipment is presently available or in use for commercial products, OPEI Br. 45-58, or that it will be available by the compliance deadlines, *id.* at 58-62. As explained below, CARB's conclusion regarding the technological feasibility of the 2028 model-year compliance deadline for commercial pressure washers was especially lacking in support.

1. Manufacturers of commercial pressure washers simply cannot meet the SORE Rule's compliance deadline. Commercial pressure washers are pressure washers that typically have engines with displacements of 225 cubic centimeters or greater. Users rely on commercial pressure washers for critical maintenance and cleaning tasks. For example, both governmental and non-governmental users require commercial pressure washers to, among other things, remove invasive plants from firefighting equipment and clean, sanitize, and disinfect parks and other outdoor municipal locations. Residential pressure washers cannot perform these tasks. Rather, commercial pressure washers, which have features unavailable in residential pressure washers, are needed.

First, commercial pressure washers must produce significant water pressure and flow. That typically requires a minimum water pressure of 4,000 pounds per square inch (psi) and a substantial minimum flow rate. 3-ER-545. For example, a municipality seeking to remove graffiti requires a pressure washer that can reach 4,000 psi and a flow rate of nearly four gallons per minute. *Id.* And for other applications, the required psi and flow rates are much higher.

In fact, California expects pressure washers to meet elevated water flow requirements in certain circumstances. For instance, California's

Department of Fish and Wildlife works with local municipalities to inspect watercraft that are decontaminated with commercial pressure washers to ensure that aquatic invasive species do not destroy fisheries and cripple water systems. Cal. Fish & Game Code § 2301(a)(2)(A); *see generally id.* §§ 2301-2302. The Department recommends that to pass inspection, watercraft owners should adhere to the *Uniform Minimum Protocols and Standards for Watercraft Inspection and Decontamination Programs for Dreissenid Mussels in the Western United States* (UMPS). *See* Cal. Dep’t of Fish & Wildlife, *Preventing the Spread of Quagga and Zebra Mussels* 11, <https://perma.cc/9A8V-8SGL>. The UMPS requires water flow of at least 5 gpm for proper decontamination of watercraft. *See* Leah Elwell & Stephen Phillips, UMPS 42 (2021), <https://perma.cc/2EP7-MJKV>. The only pressure washers with a water flow of at least 5 gpm are commercial pressure washers.

In addition, users require commercial pressure washers to generate high water temperatures. As explained in comments submitted to CARB by *amicus* CETA, commercial washers typically require a “combustion heating element (burner) to increase the cleaning efficiency” of pressure washers. 3-ER-545. That is because hot water is necessary to effectively remove grease, oil, and other contaminants and to disinfect surfaces.

For this reason, California requires that pressure washers generate hot water in certain circumstances. Again, the California Department of Fish and Wildlife's requirements for watercraft decontamination are instructive. The UMPS, which the Department recommends following to decontaminate watercraft, advises using pressurized water at a minimum temperature of 120-140 degrees Fahrenheit. UMPS 24. Decontamination at that temperature range is necessary to effectively remove invasive species such as mussels and their larvae. *Id.*; see also Cal. Dep't of Fish & Game, *Protect Your Boat!* 8 (Oct. 2009), <https://perma.cc/9ULW-FKTW>.

Further, pressure washers must be capable of operating in remote locations for extended periods where recharging is not feasible. 3-ER-545-46. Only commercial pressure washers have that capability. For example, commercial pressure washers are used in remote outdoor areas and at high elevations that lack the high-voltage electric outlets that are required to recharge battery-operated pressure washers, including in farm fields and parks, and when cleaning the windows of high-rise buildings. Commercial pressure washers are used in these areas to remove invasive species, sanitize and disinfect public spaces, and clean farming and other equipment. Use in these remote locations thus requires commercial

pressure washers that are capable of operating for at least six hours without the need to recharge.

2. *Amicus* CETA explained in comments to CARB that commercial pressure washers currently require internal combustion engines to perform the tasks above. 3-ER-545. CARB nonetheless concluded that the SORE Rule's zero-emission standard is technologically feasible for all 2028 model-year commercial pressure washers. EPA relied on that conclusion in declining to find that the SORE Rule is not consistent with the Clean Air Act's technological-feasibility requirements. That was erroneous for several reasons.

First, no commercial pressure washer currently meets the zero-emission standard in the SORE Rule. EPA relied on CARB's representation that "48 applications for generators and pressure washers have been certified" by CARB as compliant with the zero-emission standard. 1-ER-54. But the document supporting CARB's representation merely identifies "engine and evaporative families that have been certified for use in pressure washers." CARB May 8, 2024 Comments 13. That document does not identify any pressure washer on the market that contains an engine that CARB has certified, much less a pressure washer that can perform the commercial-grade tasks described above.

CARB’s administrative record contains only one commercial pressure washer that complies with the SORE Rule. CARB May 8, 2024 Comments 5 & Ex. A, at 10. But that pressure washer cannot perform all of the tasks above. The pressure washer does emit water at higher temperatures but does not have a minimum water pressure of 4,000 psi. *See* Tuffy Cleaning Systems, *TUFFY PowerLoad Intro*, YouTube (Sept. 21, 2022), <https://perma.cc/732L-4TMN>. Further, it is designed for stationary use or placement in the bed of a pickup truck. *Id.* The pressure washer thus cannot operate in remote locations. As explained above, these missing features are necessary for commercial pressure washers to perform heavy-duty tasks that businesses and governments require—including uses mandated by California.

CARB’s website currently identifies a second commercial pressure washer that complies with the SORE Rule. *See* Cal. Air Res. Bd., *Zero-Emission Commercial Pressure Washers*, <https://perma.cc/T6NQ-R7HL>. But that pressure washer also cannot perform professional-grade tasks. It does not generate hot water. *See* Karcher, *Introducing Cleanwave*, <https://perma.cc/24Z4-U8QN>. Further, the product’s runtime is only 90 minutes, Karcher, *Welcome to the Revolution 2*, <https://perma.cc/QUER4-VT65>, which renders it unusable in remote locations where commercial

pressure washers often are needed. Like the washer identified in the record, this washer is not an adequate replacement for commercial pressure washers with internal combustion engines that users rely on today. Simply put, a standard cannot be technologically feasible if it requires users to fundamentally alter their operations or abandon essential applications.

Second, not only did CARB fail to identify any currently-available pressure washers that perform commercial-grade tasks and satisfy the requirements in the SORE Rule, but it also improperly concluded that 2028 model-year commercial pressure washers will be able to meet the zero-emission standard. CARB reasoned that manufacturers will be able to produce compliant products for model year 2028 because the SORE Rule “provide[s] manufacturers over five years to implement currently available compliance technology into their products.” 2-ER-307. But nowhere did CARB explain how manufacturers will be able to perform that feat. EPA relied on CARB’s flawed reasoning in authorizing the SORE Rule. 1-ER-40.

CARB’s failure to demonstrate technological feasibility is unsurprising. Comments to CARB from *amicus* CETA did not indicate that manufacturers can produce compliant products for model year 2028. 3-ER-546. Indeed, CETA is not aware of any zero-emission pressure washers expected to be available for model-year 2028 that can perform the

commercial-grade tasks above. That is because battery manufacturers have yet to develop a one-size-fits-all battery that can operate all engines for commercial pressure washers. Accordingly, each manufacturer must individually develop bespoke pressure washers that are capable of using the batteries and cannot simply plug batteries that currently are on the market into existing models of commercial pressure washers. And there is no indication that such products will have the performance capabilities to meet the commercial pressure washer industry's needs. Despite these problems, CARB did not even try to explain how it expected manufacturers to design bespoke products in time for the 2028 compliance deadline.

EPA's and CARB's failure to reasonably evaluate commercial pressure washers is emblematic of its broader approach to the technological-feasibility requirement. As OPEI explained, CARB simply assumed that manufacturers could develop compliant products in time to meet the compliance deadline without actually considering whether doing so was technologically feasible. OPEI Br. 58-62. EPA then took that assumption at face value even though the record makes clear that it is unsupported. The SORE Rule therefore violates the Clean Air Act.

**B. In Authorizing The SORE Rule, EPA Did Not Take Into Account The Costs Of Industry Compliance**

The SORE Rule also is not consistent with the Clean Air Act because EPA did not adequately consider the cost of compliance. The Clean Air Act prohibits a standard from taking effect unless EPA “giv[es] appropriate consideration to the cost of compliance within” the period that EPA “finds necessary to permit the development and application of the requisite technology.” 42 U.S.C. § 7521(a)(2); *id.* § 7543(b)(1)(C). Even assuming that manufacturers could develop compliant products by the SORE Rule’s deadline, EPA did not account for the cost of compliance in two key respects.

First, EPA did not adequately consider the cost for manufacturers to develop and produce products that comply with the SORE Rule or the decline in revenue when those same manufacturers will not have compliant products to sell when the rule takes effect. Second, EPA did not consider the costs borne by dealers and manufacturers that will no longer be able to service certain products that contain small off-road engines.

**1. EPA did not adequately consider the cost for manufacturers to make compliant products**

EPA relied on CARB’s compliance-cost analysis with respect to the cost of manufacturers to make products that comply with the SORE Rule. But when CARB calculated the cost of compliance, it did not rely on the

actual costs for manufacturers to build compliant products. Rather, as EPA acknowledged, CARB used retail prices to determine the cost of compliance. 1-ER-60.

As OPEI explains, that was a mistake. OPEI Br. 62-68. EPA has long recognized that the costs of compliance are those costs borne by regulated parties. 1-ER-59; *see, e.g.*, 46 Fed. Reg. 26371, 26373-74 (May 12, 1981); 38 Fed. Reg. 30136 (Nov. 1, 1973). Despite this longstanding approach, EPA used retail prices as a proxy for manufacturer costs. But that proxy is misleading. Retail prices do not always accurately track manufacturer costs. For example, manufacturers may decrease profit margins to account for competition and other market considerations. *See* OPEI Br. 64.

Even if CARB and EPA were justified in relying on retail prices, the data they relied on was flawed. *See* OPEI Br. 66-68. With respect to commercial pressure washers, for example, EPA stated that “the commercial battery powered pressure washer is roughly eight times the price and costs roughly \$8,800 more than the spark-ignition SORE pressure washer.” 1-ER-71. That is incorrect. The only zero-emission pressure washers that CARB identified—which do not perform basic tasks required for commercial pressure washing, *see supra* pp. 16-18—range from \$30,000 to over \$65,000. *See* Cougar Chemical, *Karcher CleanWave Battery Powered*

*Skid*, <https://perma.cc/GMT5-6Q9M> (starting at \$30,307.75); NorthBay Equipment Service & Sales, *Tuffy Powerload Battery Powered*, <https://perma.cc/CVW8-YUE3> (\$66,549). Those pressure washers are not roughly \$8,800, but instead roughly \$24,600 to \$54,000, more expensive than commercial pressure washers with internal combustion engines. Commercial pressure washers that can perform the tasks above typically cost \$5,600 to approximately \$11,000. *See, e.g.*, Ferguson Home, *Simpson 65133*, <https://perma.cc/DNC2-WPV2> (\$5,599.99); Ferguson Home, *Simpson 95005*, <https://perma.cc/MXP5-NJTQ> (\$11,375.00). CARB's analysis of consumer prices therefore was flawed.

Further, EPA overlooked CARB's failure to take into account significant industry compliance costs. Many manufacturers will not have compliant products to sell when the SORE Rule takes effect because zero-emission technology does not exist for certain products. *Supra* pp. 16-18; OPEI Br. 58-62. Once the rule takes effect, manufacturers will not be able to sell products in the California market that are out of compliance with the SORE Rule, *i.e.*, products with internal combustion engines. Manufacturers also will need to divert significant resources and manpower away from developing products that are sold elsewhere in the United States to try to develop products that comply with the SORE Rule. Manufacturers also may

need to furlough or lay off workers who otherwise would build products that are currently sold in California and to close factories or have them lay idle while they work to develop compliant products. Because CARB failed to take into account these industry costs, EPA should have found that the SORE Rule is not consistent with the Clean Air Act because it does not appropriately consider the cost to develop and apply the requisite technology to comply with the SORE Rule.

**2. EPA did not adequately consider the cost of compliance for manufacturers and dealers from maintenance**

Second, the cost analysis did not account for the loss of revenue from servicing small off-road engines. When EPA reviewed CARB's analysis, it limited its review to the "costs that pertain to the manufacturers' development and application of requisite technology" based on the view that the rule "directly regulate[s] manufacturers" only and only with respect to developing compliant technology. 1-ER-59. EPA was mistaken in that conclusion.

In addition to heightening emissions standards for new products, the SORE Rule regulates the type of product maintenance that dealers and manufacturers may undertake. CARB regulations require manufacturers to provide a warranty to small off-road engines built after 1995. 13 Cal. Code

Regs. § 2405(a)-(b). As part of that warranty, manufacturers must repair or replace engines. *Id.* § 2405(c). In practice, dealers and manufacturers both repair and maintain small off-road engines.

The SORE Rule does not alter this requirement. Manufacturers and dealers must still provide maintenance and repair to small off-road engines built after 1995 that are under warranty. But the SORE Rule puts manufacturers and dealers in a bind. They cannot produce new replacement engines that are compliant with the zero-emission standard because, as discussed, that technology does not currently exist. As a result, they must turn to the existing inventory of internal-combustion engines to replace engines on otherwise functioning products under warranty. But that inventory eventually will be depleted. At that point, manufacturers and dealers no longer will be able to offer replacement engines. As a result, buyers will no longer visit manufacturers and dealers for maintenance and service for those products. EPA erroneously omitted these substantial costs from its analysis.

For its part, CARB acknowledged the costs, but its response was inadequate. Concerned parties raised the warranty issue with CARB. *See* 5-ER-971-72. In response, CARB simply stated that the SORE Rule “do[es] not prohibit the sale of CARB-certified” small off-road engines or “require

retail sales of a certain model year to be completed by any deadline.” 5-ER-972. But that does not solve the problem above. As a result of the SORE Rule, manufacturers and dealers will run out of replacement engines to service products that are under warranty and thus will be left unable to service those products.

### **C. The SORE Rule Creates Serious Safety Risks From Commercial Pressure Washer Use**

Before authorizing a California standard, EPA must “give appropriate consideration to safety factors (including the potential increased risk of burn or fire) associated with compliance with the California standard.” 40 C.F.R. § 1074.105(c). But EPA did not properly consider the safety hazards that the SORE Rule may create by increasing the use of battery-operated commercial pressure washers in remote locations and extreme temperatures.

As *amicus* CETA explained to CARB, commercial pressure washers are used in remote environments and in extreme weather conditions to decontaminate farm equipment, remove invasive species, and clean windows on skyscrapers. 3-ER-546-47; *see supra* pp. 15-16. Current battery technology is insufficient for those conditions, which quickly drain battery capacity and can damage battery components and accelerate battery aging. Further, using battery-operated pressure washers in these environments

may present serious safety hazards. *See* OPEI Br. 26, 53-54; 2-ER-156-57. As EPA is well aware, “[h]igh temperatures” can “increase the risk of thermal runaway” resulting in lithium-ion fires. U.S. Env’t Prot. Agency, *An Analysis of Lithium-ion Battery Fires in Waste Management and Recycling* 5 (July 2021), <https://perma.cc/RM3Z-85GF>. Battery use in commercial pressure washers in particular may increase the risk of fire hazard given their frequent use in extreme conditions and in remote locations where it is more difficult to contain fires.

Rather than address this concern, CARB largely dismissed it. CARB stated that “[t]hese concerns are properly addressed by” other state and federal agencies “and are outside of the scope of EPA’s review of an authorization request.” CARB May 8, 2024 Comments 3. CARB then noted safety risks associated with gasoline powered equipment. *Id.* at 13-14. It did so even though the Clean Air Act requires consideration of the safety risks “*associated with compliance* with the California standard.” 40 C.F.R. § 1074.105(c) (emphasis added). EPA in turn relied on CARB’s analysis to dismiss the safety risks created by the SORE Rule. 1-ER-84-85.

That rote analysis is insufficient to qualify as “appropriate consideration to safety factors (including the potential increased risk of burn or fire) associated with compliance with the California standard.” 40

C.F.R. § 1074.105(c). EPA was required to evaluate the safety threat associated with compliance. That is, EPA had to evaluate the incremental risk posed by using battery-operated commercial pressure washers and other regulated equipment in remote locations and extreme temperatures. Its failure to do so renders the SORE Rule inconsistent with the Clean Air Act.

## **II. THE SORE RULE WILL HARM INDUSTRY AND THE PUBLIC**

The SORE Rule will harm *amici's* industries and the public. As discussed above, the Rule will impose tremendous costs on manufacturers of products with small off-road engines, including companies that make commercial pressure washers. That will result in massive losses in revenue for manufacturers, who no longer will have products to sell in California. As discussed above, manufacturers will be forced to make difficult decisions, including potentially laying off employees. And the effects could be even worse for smaller manufacturers, who could go out of business entirely.

Further, dealers in California that sell products containing small off-road engines will suffer substantial financial losses from the SORE Rule. More than 70 percent of the heavy-duty products sold by dealers contain gasoline-powered small off-road engines that do not comply with the SORE Rule. With a dearth of compliant technology, dealers will suffer substantial

losses to their revenue. Dealers that sell equipment like commercial pressure washers for which there are no technologically-feasible alternatives will no longer be able to offer products that meet their customers' needs. Further, users who otherwise would replace equipment more regularly will delay doing so given the absence of compliant products that can meet their performance requirements.

This loss of revenue will be disastrous to dealers. Larger dealers may be forced to shutter stores and furlough or lay off employees given reduced sales. Smaller dealers will face the difficult choice between either scaling back to much smaller operations or shutting down their businesses.

In addition, as discussed, dealers previously sold engines subject to the SORE Rule with warranties requiring the repair and replacement of engines. A recent study by *amicus* NAEDA found that nearly 20 percent of dealers' 2025 sales came from servicing equipment, which accounted for over 80 percent of gross margins. NAEDA, *Cost of Doing Business Study 4* (2025), <https://perma.cc/X6J2-FA66>. That important revenue stream will wither under the SORE Rule, further putting pressure on dealers to reduce their operations.

Outdoor power equipment rental companies also will acutely feel the impact on their servicing and maintenance operations. Rental companies

offer a wide range of products for governmental, commercial, and private users, including lawn mowers, leaf blowers, portable generators, pressure washers, chainsaws, and concrete mixers, all of which rely on small off-road engines. Rental customers often use equipment more intensively, which increases the need for timely and cost-effective maintenance and servicing. But the SORE Rule will disrupt that maintenance, which in turn will result in more products for which there are no replacement engines. Further, given the lack of available products that comply with the zero-emission standard, rental companies eventually will run out of many products that their customers require. For equipment categories for which there are products that comply with the SORE Rule, rental companies will be forced to expend far more capital purchasing compliant products, many of which cannot perform the tasks that renters require. This will further decrease revenue for companies that rely on outdoor equipment rentals.

The SORE Rule will also harm the public. As discussed, the rule will leave governmental and non-governmental users without replacement equipment needed to provide vital public services. For example, commercial pressure washers are used to control the spread of invasive plants on firefighting equipment; decontaminate watercraft to fend off invasive species; clean and disinfect parks, playgrounds, public benches, and bus

stops; sanitize construction and agricultural machinery and equipment; and jet sewers to remove debris. *See supra* pp. 13-14; *see also, e.g.*, Washing Equipment of Texas, *The Most Common Applications of Commercial Pressure Washers*, <https://perma.cc/U5H4-YYFM>. The same is true of many other equipment categories for which battery-operated alternatives do not currently exist or are prohibitively expensive. OPEI Br. 50-52, 59-61.

As discussed, many of these essential functions cannot be completed with products that comply with the SORE Rule. *See supra* pp. 15-18; *see also* OPEI Br. 51-52. And even the products that CARB identified, which cannot fulfill these functions, will offer little solace to small businesses and local governments, which would have to pay hundreds of thousands of dollars to replace their commercial pressure washer fleets with zero-emission washers. The SORE Rule thus will prevent governmental and non-governmental users from purchasing or renting effective equipment to perform essential public services. That in turn will disrupt these activities and many other activities that depend on products for which battery-operated alternatives simply do not currently exist, putting public health and safety at risk.

## CONCLUSION

The Court should grant the petitions for review, find the SORE waiver violates the Clean Air Act, and vacate EPA's authorization of the SORE Rule.

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