



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
Honolulu, HI 96801-3378
doh.testimony@doh.hawaii.gov

**Testimony in OPPOSITION to HB 1546
RELATING TO AIR POLLUTION**

REPRESENTATIVE AARON LING JOHANSON, CHAIR
HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
Hearing Date: 2/16/2022 Room Number: Via Videoconference

1 **Fiscal Implications:** This measure will impact the priorities identified in the Governor's
2 Executive Budget Request for the Department of Health's (Department) appropriations and
3 personnel priorities. Proposed requirements will require additional staff time and effort.

4 **Department Testimony:** The Department respectfully opposes this measure that proposes to
5 prohibit exhaust from new small off-road engines, which are primarily used in lawn and garden
6 equipment, and essentially mandate electric-powered engines, by January 1, 2024.

7 The Department opposes this bill as it conflicts with federal law. Federal law prevents
8 Hawaii from prohibiting small nonroad engines based on emissions. 42 U.S. Code §7543 and
9 40 CFR Part 1074 preempts states, other than California and other nonattainment states (states
10 that do not meet the National Ambient Air Quality Standards (NAAQS)), from adopting or
11 attempting to enforce any standard or other requirement relating to the control of emissions from
12 new nonroad engines. Also, the Federal Consolidated Appropriations Act, 2004, Section 428,
13 H.R. 2673 (with exceptions for California and nonattainment states) prohibits states from
14 adopting or attempting to enforce any standard or other requirement applicable to spark-ignition
15 engines smaller than 50 horsepower. Based on these federal laws, the State of Hawaii, which is
16 in attainment with the NAAQS, is prohibited from adopting or enforcing such a prohibition.

17 In addition, while the Department recognizes that these categories of engines do emit
18 localized air pollution, the overall emissions levels are very small. Gasoline lawn and garden
19 equipment are estimated to emit less than 1% of Hawaii's total emissions for oxides of nitrogen,

1 volatile organic compounds, and particulate matter. The measured levels of the air pollutants
2 that generate ozone or smog, as described in the bill, from all sources including major stationary
3 facilities in Hawaii, are well below the NAAQS. The NAAQS, set by the U.S. Environmental
4 Protection Agency (EPA) to protect public health and welfare, are numerical thresholds below
5 which health impacts are not expected. As a result, the additional resources needed to reduce or
6 eliminate emissions from these engines would provide very limited benefit to public health or the
7 environment.

8 California and other nonattainment states which have additional requirements placed on
9 them by the U.S. EPA are required to take measures to achieve attainment, necessitating
10 resources and funding to implement such programs in an effort to reduce or eliminate their
11 additional obligations. Hawaii, which is already in attainment with the NAAQS, is not subject to
12 these obligations.

13 Finally, this measure further directs the Department to submit a report to the Legislature
14 with recommendations for funding rebates or other incentives to support the transition to zero
15 emissions off-road equipment. We recognize that several air quality management districts in
16 California offer rebates to make the switch but most, if not all, are in nonattainment for ozone.
17 As a result, Hawaii would be investing funds into a rebate program that would require additional
18 funds and resources but would not provide significant public health or environmental benefits,
19 nor reduce U.S. EPA program requirements.

20 **Offered Amendments:** None

21 Thank you for the opportunity to testify on this measure.



**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
THIRTY-FIRST LEGISLATURE, 2022**

ON THE FOLLOWING MEASURE:

H.B. NO. 1546, RELATING TO AIR POLLUTION.

BEFORE THE:

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

DATE: Wednesday, February 16, 2022 **TIME:** 2:00 p.m.

LOCATION: State Capitol, Room 329, Via Videoconference

TESTIFIER(S): Holly T. Shikada, Attorney General,
Lyle T. Leonard, Deputy Attorney General, or
Dale K. Sakata, Deputy Attorney General

Chair Johanson and Members of the Committee:

The Department of the Attorney General opposes this bill, because it is preempted by federal law.

The purpose of this bill is to require the Department of Health to adopt rules to protect public health and the environment from the harmful effects of emissions of small off-road engines (page 3, lines 3-6). This bill adds a new section to part II of chapter 342B, Hawaii Revised Statutes, that would, among other things, require those rules to prohibit engine exhaust and evaporative emissions from new small off-road engines (page 3, lines 11-14).

In this regard, the bill would be in conflict with the federal Clean Air Act (CAA). The CAA provides that:

No State or any political subdivision thereof shall adopt or attempt to enforce any standard or other requirement relating to the control of emissions from either of the following new nonroad engines or nonroad vehicles

42 U.S.C. § 7543(e)(1).

The CAA's preemption of state laws regulating emissions has been upheld by the United States Supreme Court in Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist., 541 U.S. 246, 124 S. Ct. 1756, 158 L. Ed. 2d 529 (2004) (involving state laws that required local fleet operators to purchase only vehicles meeting state emissions standards). In reiterating the CAA's preemptive effect, courts have recognized that the

purpose of federal preemption is to avoid "an anarchic patchwork of federal and state regulatory programs, a prospect which threatened to create nightmares for manufacturers." Engine Mfrs. Ass'n v. U.S. Env'tl. Prot. Agency, 88 F.3d 1075, 1079 (D.C.Cir.1996).

The bill's mandate to "prohibit engine exhaust and evaporative emissions from new small off-road engines" is an emissions standard and is therefore preempted by the CAA. We respectfully suggest that this bill be held.

Thank you for the opportunity to testify.

February 15, 2022

Transmitted via electronic submission

Re: OPEI Comments on HI SB 2128 / HB 1546 – Relating to Prohibition of Engine Exhaust and EVAP Emissions from Small Off-Road Engines

The Outdoor Power Equipment Institute (“OPEI”) opposes HI SB 2128 / HB 1546 which will prohibit engine exhaust and evaporative emissions from small off-road engines. HI SB 2128 / HB 1546 will negatively impact OPEI members and hardworking professionals throughout Hawaii.

The Outdoor Power Equipment Institute (“OPEI”) is an international trade association representing more than 100 manufacturers and their suppliers of outdoor power equipment. OPEI member products are ubiquitous in American households and businesses. Outdoor power equipment such as lawnmowers, trimmers, chain saws, snow throwers, generators, water pumps, pressure washers, and utility vehicles are the lifeblood of millions of hardworking landscape and construction professions, 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 “zero-emission” equipment (ZEE), with electric products dating back more than 70 years. Recent advancements in battery technology have accelerated ZEE growth for many product categories. In fact, the majority of “handheld” products shipped *are already ZEE.* Electric “handheld” leaf blowers and electric hedge trimmers represented 80% of all product shipments in 2021. Residential electric walk-behind mower shipments have ballooned from just 5% of total walk-behind lawnmowers in 2014 to 37% in 2021. These trends will continue without legislative action. HI SB 2128 / HB 1546 is unnecessary.

However, due to the wide range of powered 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, and emergency response workers. Supply chain, electrical grid infrastructure, and product transportation also present significant concerns.

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, in real-world testing, OPEI member testing shows that the battery-powered unit’s

performance¹ 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, until the unit ran out of gas.

Additionally, consideration must be given to the availability of grid power in many instances when / where outdoor power equipment is used. Generators, water pumps and chain saws used off-the-grid and in emergency response situations require continuous power alternatives not possible with electric equipment options.

These performance differences raise significant concerns for landscape and construction professionals, and emergency respondents who demand steady, reliable and continuous performance.

Zero Emissions Equipment Cost Challenges

The number and cost of batteries needed for high-use applications are additional concerns. CARB’s survey and modeling data estimates that landscaper professionals that own 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 the modeled power demand*, resulting in an upfront battery cost exceeding \$10,500. Based on CARB performance modeling, batteries would need to be replaced approximately every 3 years, resulting in thousands of dollars in on-going battery “maintenance” costs.

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.

Small businesses, many of which are low income and minority owned, would be hit hardest by the unaccounted for and/or unanticipated costs of HI SB 2128 / HB 1546.

Emissions Are Already Federally Regulated

Emissions are a common discussion point surrounding OPE. “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. Fuel system emission regulations have further reduced smog forming emissions compared to outdoor power equipment a decade ago.

¹ Measured as blower force in Newtons in accordance to ANSI/OPEI B175.2 standard.

Industry is committed to advancing emission reduction technologies. In fact, many popular lawnmower and leaf blower options are certified well below federal standards – and well below “fact sheet” comparisons. As a result of federal small spark-ignited engine regulations 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 agencies have yet to accurately account for recent and projected ZEE market growth when estimating sector emissions. ZEE growth will continue to drive additional reductions well beyond today’s agency estimates.

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 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, prohibit states or any political subdivisions from adopting or attempting to enforce any standard or other requirement applicable to spark ignition engines smaller than 50 horsepower – Including adoption of California small off-road engine emission regulations for which EPA has authorized a waiver of preemption. In short, EPA could not approve the waiver of preemption required under Section 209(e) to allow Hawaii to set unique or separate emission standards or requirements for small-engine outdoor powered equipment.

A Robust Enforcement Program is Necessary

A robust enforcement program for HI SB 2128 / HB 1546 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 ban proposed by HI SB 2128 / HB 1546. 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.

For these reasons, OPEI opposes HI SB 2128 / HB 1546.

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

Respectfully submitted,

Greg Knott
Vice President, Standards and Regulatory Affairs
Outdoor Power Equipment Institute
Phone: (703) 549-7600
gknott@opei.org
www.opei.org

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 “zero-emissions” equipment (ZEE) for more than 70 years.
- ZEE is the number one driver of OPE demand and future industry growth.
- In 2021 shipped products were predominantly ZEE:
 - 56% of lawn and garden OPE shipped was ZEE;
 - 63% of handheld products shipped were ZEE;
 - 37% of walk-behind mowers shipped were ZEE – Up from 5% in 2014.
- OPEI members are focused on growing the ZEE 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.
 - ZEE is widely accepted for residential lawn and garden applications, however, further advancements are necessary for ZEE 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 ZEE 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

HB-1546

Submitted on: 2/15/2022 10:35:34 AM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ted Bohlen	Climate Protectors Hawai'i	Support	Yes

Comments:

To: The Honorable Aaron Ling Johanson, Chair, the Honorable Lisa Kitagawa, Vice Chair, and members of the House Consumer Protection and Commerce Committee

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB1546 RELATING TO AIR POLLUTION.

Wednesday February 16, 2022, 2:00 p.m., by videoconference

Aloha Chair Johanson, Vice Chair Kitagawa, and members of the House Consumer Protection and Commerce Committee:

Position: **Climate Protectors Hawai'i STRONGLY SUPPORTS HB1546!**

Small off-road engines are used primarily in **lawn and garden equipment, including leaf blowers and lawnmowers. They burn fossil fuels and emit high levels of air pollutants,** including nitrogen oxides, reactive organic gases, and particulate matter, which together **harm human health and contribute to greenhouse gases that warm the climate.** One hour of operation of a commercial leaf blower reportedly can emit as much reactive organic gases and oxides of nitrogen as driving 1,100 miles in a new passenger vehicle! **Hawai'i has declared a climate emergency and needs to control emissions from small off-road engines** and other sources.

Small off-road engines also emit **noise** that is difficult to regulate because of the mobile and dispersed nature of this equipment;

This Act would require the Department of Health, where consistent with federal law, to adopt cost-effective and technologically feasible rules to prohibit engine exhaust and evaporative emissions from new small off-road engines after January 1, 2024. This will help protect public health and the environment from the harmful effects of emissions of new small off-road engines. The Department of Health shall report to the Legislature before 2024 with recommendations for funding commercial rebates or similar incentive funding to support the transition to zero emission small off road equipment operations.

This bill would help the Department of Health protect public health and the environment from the harmful effects of emissions of new small off-road engines. It is needed to help Hawaii reach carbon negativity as soon as possible, not later than 2045.

Please pass this bill!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)

HB-1546

Submitted on: 2/15/2022 12:11:31 PM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Sherry Pollack	350Hawaii	Support	No

Comments:

350Hawaii supports HB1546 that requires the Department of Health (DOH) to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines. This bill would help the DOH protect public health and the environment from the harmful effects of emissions of new small off-road engines. It is one of the important steps needed to help Hawaii reach our carbon negative goals.

Thank you for the opportunity to testify on this important measure.

HB-1546

Submitted on: 2/14/2022 10:48:13 PM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Andrea Nandoskar	Individual	Support	No

Comments:

Please support this bill!

Mahalo for your consideration.

HB-1546

Submitted on: 2/15/2022 9:33:38 AM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Douglas Perrine	Individual	Support	No

Comments:

I support HB1546 to support the transition to zero-emission off-road equipment

HB-1546

Submitted on: 2/15/2022 1:18:47 PM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Matthew Geyer	Individual	Support	Yes

Comments:

Strong support for HB1546 to help accelerate the transition to greener cleaner technologies in the small engine sector.

HB-1546

Submitted on: 2/15/2022 1:29:23 PM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Keith Neal	Individual	Support	No

Comments:

I support HB1546

Adoption of the measure is important to reducing Hawaii's Green House Gas emissions and mitigate pollution brought on by fossil fuel use.

Respectfully submitted,

-Keith Neal

HB-1546

Submitted on: 2/15/2022 1:36:38 PM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Paul Bernstein	Individual	Support	No

Comments:

Aloha Chair Johanson, Vice Chair Kitagawa, and members of the House Consumer Protection and Commerce Committee:

I'm writing in support of HB1546. Small off-road, fossil-fired engines are generally high emitters of ground level pollutants on a per gallon of fuel used. If we are concerned about public health and air quality, we should do what we can to reduce these emissions. HB1546 attempts to do so by requiring the Department of Health, where consistent with federal law, to adopt cost-effective and technologically feasible rules to prohibit engine exhaust and evaporative emissions from new small off-road engines after January 1, 2024. Ultimately, the reduction of emissions should lead to electrification of the items that use these engines thus helping protect public health and the environment from the harmful effects of emissions of new small off-road engines.

Respectfully,

Paul Bernstein

LATE

HB-1546

Submitted on: 2/16/2022 11:17:42 AM

Testimony for CPC on 2/16/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Dave Mulinix	Individual	Support	Yes

Comments:

Aloha Committee,

I stand in Strong Support of HB1546 that requires DOH to, consistent with federal law, adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines.

Climate Change is already here and to mitigate the worse effects of Climate Change we must immediately cut our CO2 emissions.

Please pass HB1546.

Mahalo for your kind attention,

Dave Mulinix

Kahalu'u