DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

Testimony of SUZANNE D. CASE Chairperson

Before the Senate Committee on AGRICULTURE AND ENVIRONMENT

Wednesday, February 6, 2019 1:45 PM State Capitol, Conference Room 224

In consideration of **SENATE BILL 11** RELATING TO POLYSTYRENE FOAM CONTAINERS

Senate Bill 11 proposes to prohibit the sale of polystyrene foam containers and serving of prepared foods using polystyrene foam containers statewide. It would also authorize the Department of Health to adopt rules to implement the prohibition and include within its administrative rules a requirement for food vendors to educate their customers about proper disposal of nonreusable food containers and litter reduction. The Department of Land and Natural Resources (Department) appreciates the intent of this measure and offers the following comments.

The Department recognizes the deleterious impacts of marine debris on wildlife and their habitats as a primary natural resource issue throughout the State. Marine debris degrade land and ocean-based habitat through smothering and abrasion and impact a variety of wildlife (aquatic and terrestrial) through ingestion and entanglement. Hawai'i has the highest reported debris accumulations in the United States' Pacific Ocean Coastlines.

Although a large amount of marine debris arrives from the ocean, it is all of our responsibility to reduce the amount of debris entering and re-entering our ocean and beaches. Senate Bill 11 would help reduce the polystyrene debris load entering Hawaii's shorelines and contribute to the improved health of our wildlife and their habitats.

The Department however shares the Department of Health's concerns regarding administration and enforcement of this initiative.

Thank you for the opportunity to comment on this measure.

SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA

M. KALEO MANUEL

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DAVID Y. IGE GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D. DIRECTOR OF HEALTH

DEPARTMENT OF HEALTH

P. O. Box 3378 Honolulu, HI 96801-3378 doh.testimony@doh.hawaii.gov

WRITTEN **TESTIMONY ONLY**

Testimony COMMENTING on SB0011 RELATING TO POLYSTYRENE FOAM CONTAINERS

SENATOR MIKE GABBARD, CHAIR SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT Hearing Date: February 6, 2019 Room Number: 224

- **Fiscal Implications:** Unknown 1
- **Department Testimony:** This bill proposes to ban the sale of polystyrene foam containers in 2
- 3 the state; and, ban restaurants from serving prepared foods using polystyrene foam containers.
- The Department of Health (Department) recognizes the urgency to address the impact of 4
- 5 plastic on the environment. However, we note that the proposed ban duplicates existing county
- bans. Polystyrene food container bans are active or about to begin in Hawaii County and Maui 6
- 7 County.
- Generally, sales prohibitions do not fit into our existing regulatory programs. 8
- 9 Additionally, many of our programs already operate under constrained resources meaning that
- 10 implementing the proposed programs will require additional resources. Therefore, we ask that
- the appropriation to implement this measure does not impact the priorities identified in the 11
- 12 Governor's Executive Budget Request and the Department's appropriations and personnel
- priorities. 13
- **Offered Amendments:** None 14
- 15 Thank you for the opportunity to testify on this measure.



PHONE: (808) 323-4267 FAX: (808) 323-4786 EMAIL: Rebecca.villegas@hawaiicounty.gov

HAWAI'I COUNTY COUNCIL

West Hawai'i Civic Center, Bldg. A 74-5044 Ane Keohokalole Hwy. Kailua-Kona, Hawai'i 96740

February 5, 2019

TESTIMONY OF REBECCA VILLEGAS COUNCIL MEMBER, HAWAI'I COUNTY COUNCIL ON SB 11, RELATING TO POLYSTYRENE FOAM CONTAINERS

Committee on Agriculture and Environment Wednesday, February 6, 2019 1:45 p.m. Conference Room 224

Aloha Chair Gabbard and Members of the Committee:

I thank you for the opportunity to testify in support of SB 11, relating to polystyrene foam containers. My testimony is submitted in my individual capacity as a member of the Hawai'i County Council and Chair of the Public Safety Committee.

The purpose of this measure is to protect the State's economy and environment by prohibiting the sale of polystyrene foam containers and serving of prepared food using polystyrene foam containers statewide.

Most common kinds of litter pollution in Hawai'i are from polystyrene foam. Polystyrene foam is ultra-light weight, which prevents collection systems from capturing it and allows it to easily accumulate on land and in waterways. Fragments of polystyrene foam harm the environment, the local food chain, and contributes to the potential death of marine animals and avian populations through ingestion. Through education, positive environmental changes and reduction of litter campaigns will assist with successful long-term litter solutions which can only benefit the State of Hawai'i.

For the reasons stated above, I urge the Committee on Agriculture and Environment to support his measure as well. Should you have any questions, please fell free to contact me at (808) 323-4267.

Mahalo for your consideration.

Council Member, Hawai'i County Council

<u>SB</u>-11

Submitted on: 2/5/2019 1:07:06 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-------------------|--------------|-----------------------|-----------------------|
| Tamara Farnsworth | Individual | Support | No |

Comments:

Aloha,

I am writing in favor of SB No.11 on behalf of the County of Maui Department of Environmental Management, the agency responsible for the implementation and enforcement of the polystyrene food service container ban that became effective on December 31, 2018, as well as the 2010 plastic bag ban. The implementation plan to go "Foam Free" was enacted over a 18 month period with a focus on direct outreach to the food service industry and a comprehensive public education campaign over the last 7 months before effective date. The response has been overwhelmingly positive by both the public and private sectors, with the county working together with businesses that have required more assistance with the transition. We have found that almost all nearly 2000 affected businesses, along with their product distributors, have made the switch and are in compliance.

The majority of feedback we have heard from businesses is they have either absorbed any additional costs for alternative products or they have passed on those costs to their customers. The feedback we have heard from the general public is that people are happy to pay a few cents extra with the knowledge that the environment, including whales, dolphins, fish, and seabirds, are the beneficiaries of their contributions.

Maui County Council and Corporation Counsel deliberated over the issue of interstate commerce challenges and determined that the legislation was sound and that the need to reduce the source of polystyrene foam in our marine and land environments warranted any potential challenges that may arise. As of yet there have been no challenges in this regard from industry or any other party.

Plastic waste is a proven major threat to ocean ecosystems and marine wildlife. It is also a source of climate change from use of fossil fuel-based raw materials as well as greenhouse gas emissions. Those of us living in island environments, in particular, are discovering the significant positive impact that single-use plastic bans can have, as well as the resilient ability of our communities to adapt to these changes for the better. Everything is connected and healthy ecosystems are inextricably linked to healthier lives for all of us.

Maui County is learning to live without polystyrene foam food service containers and other single-use plastic products with relative ease. All of the state of Hawaii can, too. We encourage the Hawaii State Senate to champion this legislation as leaders in environmental protection.

Mahalo,

Tamara Farnsworth

County of Maui

Environmental Protection & Sustainability Division

The Voice for Hawaii's Ocean Tourism Industry 1188 Bishop St., Ste. 1003

> Honolulu, HI 96813 (808) 537-4308 Phone (808) 533-2739 Fax

> > timlyons@hawaiiantel.net

COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Senator Mike Gabbard, Chair Senator Russell E. Ruderman, Vice Chair

NOTICE OF HEARING

DATE:

Wednesday, February 6, 2019

TIME:

1:45 p.m.

PLACE:

Conference Room 224

TESTIMONY OF THE OCEAN TOURISM COALITION IN SUPPORT SB 11 RELATING TO POLYSTYRENE FOAM CONTAINERS

Chairs Gabbard, Vice Chair Ruderman, and members of the AEN Committee:

My name is James E. Coon, President of the Ocean Tourism Coalition (OTC) speaking in support of SB 11 Relating to Polystyrene Foam Containers.

The OTC represents over 300 Ocean Tourism Businesses across the State. We are an industry that promotes a clean and sustainable environment. We take pictures and leave only bubbles. Most of our companies have already made the necessary changes to their operations to eliminate Polystyrene Foam Food Containers. There are viable biodegradable and reusable options readily available.

The reduction of Polystyrene Foam in our environment will have a positive impact on our oceans.

Please pass SB 11 this is an easy but significant win for the environment.

Sincerely,

James E. Coon, President

Ocean Tourism Coalition





Aloha my name is Rebekah Magers and I am submitting testimony on behalf of the Surfrider Foundation Ocean Friendly Restaurants program in strong support of SB11, to prohibit the sale of polystyrene foam containers and serving prepared foods using polystyrene foam containers. Polystyrene foam is one of the most littered and least recycled forms of plastic and we cannot even recycle it here in Hawaii. The excuse and myth of it being recycled needs to end this year.

To become an Ocean Friendly Restaurant, restaurants have to meet 7 mandatory criteria, one of which being No Polystyrene takeout containers (see full criteria list below). The Ocean Friendly Restaurants (OFR) program was launched in April 2016 and in a matter of 3 short years we have had over 200 restaurants in Hawaii make the commitment to go without polystyrene foam containers. The OFR program and local restaurants set the precedent for this movement, leading to the launch of the national OFR program in August 2017. There are now over 400 restaurants nationwide that meet the criteria and have joined as members.

The OFR program has successfully helped restaurants become polystyrene-free with owners who want to do good and operate on a sustainable business model. None of these restaurants have reported financial burden from going foam-free and there is a community of volunteers who help make the transition easy and cost effective for the restaurants.

The economic benefit of the polystyrene ban also extends beyond restaurant owners, as many of Hawaii's main suppliers of compostable food-grade products are Hawaiian-based businesses, such as Jimmy's Sales (Kauai), Ventures Associates (Kauai), and Sustainable Island Products (Big Island).

Companies like these, as well as the over 200 Ocean Friendly Restaurants across the state, <u>are local businesses</u> providing quality service to residents and visitors by being conscious of the food they serve as well as the containers they come in. Supporting these purveyors supports local business owners.

Furthermore, SB11 is a step in the right direction to protect the environment, support Hawaii's resiliency goals, and ensure the longevity and continued success of our local economy.

Hawaii is ready for a future without Polystyrene foam. Mahalo for your consideration of this testimony and of this important issue.

Criteria for Ocean Friendly Restaurants

Mandatory Criteria

- 1. No expanded polystyrene (EPS) foam is used.
- 2. Proper recycling practices are followed.
- 3. Only reusable tableware is used in house and disposable utensils for takeout orders are provided only upon request.
- 4. No plastic bags are offered for take-out or to-go orders.
- 5. Plastic straws are provided only upon request.

Optional Criteria (Choose at least two)

- 1. Discount is offered for customers with reusable cup, mug, bag, etc.
- 2. No beverages are sold in plastic bottles.
- 3. Food options: vegetarian/vegan food options are offered on a regular basis
- 4. All seafood must be a 'Best Choice' or 'Good Alternative' as defined by Seafood Watch or certified as sustainable.
- 5. Water conservation efforts such as low-flow faucets and toilets, are implemented.
- 6. Energy efficiency efforts, such as LED lighting and Energy Star appliances, are in place.

Full List of Ocean Friendly Restaurants by Island

Maui

| Monkeypod Kitchen Ka'anapali |
|----------------------------------|
| Fleetwood's on Front St. |
| Paia Coffee & Bar |
| Kuau Store |
| Down The Hatch |
| Mama's Fish House |
| Burger Shack |
| Cheeseburger In Paradise Maui |
| Cheeseburger Grille And Tap Room |
| Wailea |
| Ka'anapali Grille And Tap Room |
| Cool Cat Cafe |
| Mill House Maui |
| Frida's Mexican Beach House |
| Honu Seafood and Pizza |
| Surfside Woodfire Pizza Kitchen |
| Leilani's |
| Kimo's |
| Hula Grill Kaanapali |
| Duke's Beach House |
| Belle Surf Cafe |
| |

| Captain Jack's Island Grill | |
|---|--|
| Ka'ana Kitchen | |
| Avelune's | |
| Merriman's Fish House | |
| Gourmet Pizza and Burgers by Merriman's | |

Big Island

| Big Island Brewhaus LLC | |
|-------------------------|--|
| Magics Beach Grill | |

Kaua`i

| naua i |
|------------------------------|
| Brennecke's Beach Broiler |
| Opakapaka Grill and Bar |
| NOM Kauai |
| Holo Holo Charters |
| Midnight Bear Breads |
| Paco's Tacos Cantina Poipu |
| Little Fish Coffee |
| Monkeypod Jam |
| Duke's Kauai |
| Keoki's Paradise |
| EAT HEALTHY KAUAI |
| Oasis on the beach |
| Coconut's Fish Cafe Kauai |
| Kountry Kitchen Restaurant |
| Rainbeau Jo's |
| Kauai Beer Company |
| Mandala Living Foods |
| Mariachi's |
| The Fresh Shave |
| The Local Kauai |
| Kauai Island Brewing Company |
| The Spot Kauai |
| Kalaheo Cafe & Coffee Co. |
| The Beach House Restaurant |
| RumFire Poipu Beach |
| Anaina Hou Community Park |
| Fresh Bite Kauai |
| |

Oʻahu

Cactus

| Tap & Barrel by Lanikai Brewing Company |
|---|
| Barefoot Beach Cafe |
| Hiking Hawaii Cafe |
| Cheeseburger In Paradise Maui |
| Cheeseburger In Paradise Maui |
| Cheeseburger In Paradise Maui |
| Makana Market and Deli |
| Koko Head Cafe |
| Aloha Beer Co. |
| Morning Brew Cafe Kaka'ako |
| Pint and Jigger |
| Seascape Maalaea |
| Stewbum & Stonewall Brewing Co. |
| Waikiki Brewing Company |
| Waikiki Brewing Company |
| Kalapawai Cafe & Deli |
| The Nook Neighborhood Bistro |
| Ali'i Coffee Co. |
| Kani Ka Pila Grille |
| Coffee Shop 831 |
| What it Dough |
| Peace Cafe |
| Duke's Oahu |
| Hula Grill |
| Lulu's Waikiki |
| Pioneer Saloon at Kakaako |
| Banzai Sushi Bar |
| Kona Brewing Company |
| 12th Ave Grill |
| Wisp Hawaii |
| Aged Artisans DBA Square Barrels |
| Encore Saloon |
| Leahi Health |
| Hau Tree Lanai Restaurant |
| Sunrise Shack Waikiki |
| Merriman's Ward Village |
| Hideout |
| Horimasa Hawaii |
| Bevy |
| Highway Inn Kaka'ako |
| Makana Ranch House |



February 5, 2019

The Honorable Mike Gabbard, Chair Committee on Agriculture and Environment Hawaii State Capitol, Room 201 Honolulu, HI 96813 The Honorable Russell E. Ruderman, Vice Chair Committee on Agriculture and Environment Hawaii State Capitol, Room 216 Honolulu, HI 96813

SUBJECT: SB 11 - Relating to Polystyrene Foam Containers - Opposed

Dear Chairman Gabbard and Vice Chair Ruderman,

On behalf of the Plastics Industry Association (PLASTICS), I am writing to offer our comments on SB 11 – an act that prohibits the sale of polystyrene foam containers and serving of prepared foods using polystyrene foam containers statewide. While we support the intent of the legislature to address plastic marine debris, we do not believe that a ban of polystyrene food service ware will achieve the environmental goals the state is striving for. For that reason, we oppose this legislation.

Expanded polystyrene is among the most efficient materials at keeping foods fresh, free of leaks and spills, and, most importantly, hot or cold. Schools, hospitals, nursing homes, non-profit food programs, delis, and family-owned restaurants are among the many institutions that rely upon expanded polystyrene for its excellent insulation at an economical price. Alternative packaging materials are often as high as 2-3 times more expensive and do not perform as efficiently. Furthermore, recyclers and expanded polystyrene manufacturers have proven that the product can be recycled.

It's also important to note that product bans often result in the substitution of products that are littered. According to the Final Staff Report for Trash Amendments - April 7, 2015, the California Water Boards found that "types of product bans enacted by an ordinance, such as take-out items, may involve a substitution of the banned item. Mere substitution would not result in reduced trash generation if such product substitution would be discarded in the same manner as the banned item."

In sum, the environmental costs of plastic alternatives are 3.8 times greater than using plastic materials. This is due to the efficient production, use and handling of plastic during the entire lifecycle of these products. We would therefore suggest more resources be placed in improving recycling infrastructure, consumer education and solid waste management strategies than banning these products.

If you have any questions, please contact me directly at 202.974.5206 or scrawford@plasticsindustry.org.

Respectfully,

Shannon V. Crawford

Director, State Government Affairs



1050 Bishop St. PMB 235 | Honolulu, HI 96813 P: 808-533-1292 | e: info@hawaiifood.com

Executive Officers

Toby Taniguchi, KTA Superstores, Chair
Joe Carter, Coca-Cola Bottling of Hawaii, Vice Chair
Charlie Gustafson, Tamura Super Market, Secretary/Treas.
Lauren Zirbel, HFIA, Executive Director
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Stan Brown, Acosta Sales & Marketing, Advisor
Paul Kosasa, ABC Stores, Advisor
Barry Taniguchi, KTA Superstores, Advisor
Derek Kurisu, KTA Superstores, Advisor

TO:

Committee on Agriculture and Environment Senator Mike Gabbard, Chair Senator Russell E. Ruderman, Vice Chair

FROM: HAWAII FOOD INDUSTRY ASSOCIATION

Lauren Zirbel, Executive Director

DATE: February 6, 2019

TIME: 1:45pm

PLACE: Conference Room

RE: SB11 Relating to Polystyrene Foam Containers

Position: Oppose

The Hawaii Food Industry Association is comprised of two hundred member companies representing retailers, suppliers, producers, and distributors of food and beverage related products in the State of Hawaii.

HFIA is in opposition to this measure, as it is a mandate on businesses that will increase costs for consumers and provide no upside for the environment. Alternatives to polystyrene are often several times more expensive, do not break down in landfills, provide less energy when burned for fuel at HPOWER, and many have to be shipped from China to the mainland and then here, as opposed to polystyrene containers which are manufactured in Kalihi.

There is also a safety concern from less sturdy non-polystyrene container. Leaks from these types of containers may burn customers, leaving retailers liable when they are unable to supply suitable containers. Consumer demand and technology should determine product offerings.

Protecting our natural environment is a goal we all share, but this bill will not address the root causes of things like marine debris and trash mismanagement. Most of the trash debris seen on beaches is the result of haphazard disposal of waste from all over the world and on the seas, which are brought here by currents. Many products do not biodegrade which is why

waste management is such an important issue. This measure mentions the importance of education and litter reduction but does not actually create any improvement in those areas and instead bans a single product. Bans may change the composition of litter but they don't address the underlying causes of poor waste management. A recent audit of polystyrene and bag bans by the City and County of Honolulu City Auditor determined that: "Minimizing litter to keep our natural environment safe from harm is an important community objective. To be successful, the city should pursue comprehensive methods rather than a simplistic ban on a single kind of litter/trash that is unlikely to effectively reduce the overall amount of litter and its harm to the environment."

The audit also noted:

"Any attempt to regulate the food service industry will impact a wide segment of Honolulu residents, largely in the form of price increases passed on to customers. Some impacts to certain vulnerable classes of residents need to be closely examined to prevent unnecessary effects and harms."

If passed this measure would threaten hundreds of jobs in Kalihi where locally produced, favorably priced, FDA approved polystyrene food containers are made. Passing this measure will ban a safe, locally created product and mandate the use of a product that is manufactured in China under less stringent environmental regulations, and then must be shipped thousands of miles to the mainland and then thousands more from the mainland to Hawaii. The carbon footprint of transporting the non-polystyrene containers outweighs any potential benefit from using them.

There are very real concerns associated with the manufacturing of some of the alternatives to polystyrene packaging. A Smithsonian Magazine article (2006) wrote that biodegradable alternatives have considerable drawbacks that haven't been publicized ... for example the cultivation of corn uses more nitrogen fertilizer, more herbicides and more insecticides than any other U.S. crop; those practices contribute to soil erosion and water pollution when nitrogen runoff enters streams and rivers. One must acknowledge the environmental trade-offs associated with the use of any packaging material and whether a mandate to use one particular type of container or product will have the desired result of reducing litter and/or marine debris.

All foodservice products – regardless of the material from which they are made – require the use of various natural resources (i.e., energy, water). A 2006 Life Cycle Inventory study by Franklin and Associates showed that polystyrene, when compared to other food service containers, is very efficient in minimizing air emissions and energy used in the manufacturing process and in reducing the amount of waterborne waste generated during the manufacturing process.

This bill makes the false assumption that products that would replace polystyrene are somehow manufactured in a vacuum without the use of any raw materials, energy, or water, or fuel to deliver the product. This is especially important considering many types of containers are produced in China where labor and quality, in addition to environmental standards, are known to be well below the labor, quality, and environmental standards practiced here on Oahu in the manufacturing facility that produces polystyrene containers for use in our local food businesses.

Extensive studies from the FDA, Health Canada and Environment Canada concluded that polystyrene is "non-toxic" and that styrene "does not constitute a danger to human life and health" and "does not constitute a danger to the environment on which human life depends."

While polystyrene is a petroleum product, it is also a resource. Here on Oahu polystyrene is utilized by HPOWER to create electricity, and because of its high BTU it generates more power than other materials. It is also currently being recycled here in Kalihi on a small scale, and is becoming a major recyclable resource in schools on the Mainland. In fact, more that 57 million pounds of packaging were recycled in 2004. Also, in accordance with EPA priorities, polystyrene manufactures have placed precedence on source reduction and reuse as well as recycling, locally here in Hawaii as well as nationally.

In general, food retailers operate at a profit margin of around one percent and small businesses, grocers and non-profits have comparably low or non-existent profit margins. With Hawaii's high prices, they struggle everyday to survive. They use polystyrene products as a primary means of dispensing food because polystyrene is cost effective and sanitary and its sturdiness protects customers from spills and burns. In addition to being FDA approved, polystyrene containers promote food safety and help to keep food fresh for longer periods of time by insulating and maintaining appropriate temperature.

While we understand the environmental concerns, there is currently **no comparable, cost** effective alternative available that provides the same level of durability, temperature regulation and overall efficacy as polystyrene.

This bill also fails to make the necessary exemptions for products such as meat, fish, eggs, or dairy, which using packaged on polystyrene for health and sanitation reasons. These products are packaged in polystyrene trays because this is the only material that meets the necessary criteria to keep our meat, poultry, fish, and dairy fresh and safe. An exemption for these products should be included in any discussion of regulating polystyrene.

We believe it is unfair to require our local businesses to use packaging alternatives that cost two to three times more than polystyrene products. While the difference per container may not seem like a lot, retailers purchase these containers by the case and in that volume the increased cost is substantial. Even if businesses pass the entire cost of the new containers on to customers, which many don't want to do, they still only recoup the added expense one container at a time while they are out the cost of the cases they have on hand. The only ways to offset this proposed prohibition are to increase prices or to take a substantial financial loss, which can contribute to layoffs or closures and leaving people without jobs. It's also essential to keep in mind that what is being discussed is an increase in the price of food, which will negatively impact Hawaii families and individuals.

Please remember that the proposed ban will not be a negligible cost against a large company; rather it will hurt non-profits, school cafeterias, grocers, restaurants, small mom and pop establishments, local manufacturing jobs, and local families- all struggling with high food and living costs. If the committee is determined to pass this ban it should have a more reasonable

implementation period to give the industry and consumers more time to adjust and mitigate the negative impacts of this ban.

For all these reasons this bill is not the right choice and for these reasons we ask that this measure be held.

Thank you for the opportunity to submit testimony.

<u>SB-11</u> Submitted on: 2/4/2019 10:10:39 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|---------------|--------------------------------------|-----------------------|-----------------------|--|
| Natalie Parra | Testifying for Keiko Conservation | Support | No | |

Comments:



49 South Hotel Street, Room 314 | Honolulu, HI 96813 www.lwv-hawaii.com | 808.531.7448 | voters@lwv-hawaii.com

COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Senator Mike Gabbard, Chair Senator Russell Ruderman, Vice Chair

Wednesday, February 6, 2019, 1:15 p.m. and 1:45 p.m., Conference Room 224

SB11 – Relating to Polystyrene Foam Containers
 SB367 – Relating to Environmental Protection
 SB522 – Relating to Plastic

TESTIMONY

Nancy Davlantes, Legislative Committee Member, League of Women Voters of Hawaii

Chair Gabbard, Vice-Chair Ruderman, committee members:

The League of Women Voters of Hawaii supports the intent of all three of these bills which would, respectively, prohibit the sale of polystyrene foam containers statewide; prohibit food service businesses and stores from the sale, use, or distribution of polystyrene foam containers, expanded polystyrene food service products, plastic straws, and plastic bags; and establish an incremental ban on plastic bottles, utensils, polystyrene foam containers, straws, plastic bags, and single -use plastic beverage containers.

Perhaps it was the photos of a honu with a plastic straw in its nostril, the pictures of the Great Pacific Garbage Patch, the stories of the unending piles of plastics that wash up not just on our shores but the shores of Midway and are ingested by the seabirds that nest there, or the micro-plastics that are making their way into our own food supply.

Whatever the confluence that brought this problem front and center to the attention to those with the wherewithal to do something about it, the League is gratified that Hawaii appears now ready to confront what is a monumental problem.

The content of these bills overlaps with one-another and offer common objectives. But they give the legislature much to work with and craft legislation that would at last address the problem here and in the Pacific. We realize the problem is worldwide but getting a handle on how to deal with it here is something we can all support.

No doubt there will be opposition from the food service-related parts of the economy, and that is to be expected, but incentives can be employed to encourage what we realize is a huge change in their way of doing business.

The bottom line is that the alternative of not acting is unacceptable.

Thank you for the opportunity to submit testimony.

SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

February 6, 2019 1:45 p.m. Room 224

In SUPPORT of SB11: Relating to polystyrene foam containers

Aloha Chair Gabbard, Vice Chair Ruderman, and members of the committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **strongly supports SB 11**, which seeks to prohibit the sale of polystyrene foam containers and serving of prepared foods using polystyrene foam containers statewide.

The Sierra Club of Hawai'i, dedicated to exploring, enjoying, and protecting these unique and beautiful islands we call home, have engaged in decades-long efforts to protect public access to trails and beaches in addition to restoring hundreds of trails on public and private land. Part of our dedication to protect is to keep these valuable public areas free of pollution from plastics and other waste. In this case, we advocate for halting harmful plastic pollution at the source. This measure is one of many that support our collective efforts to reduce pollution across the board.

Single-use plastics pollute our lands and freshwater bodies, clog up drainage systems, harm wildlife and ultimately end up in our ocean waters--settling on our reefs and, in some places, creating large plastic island gyres. Polystyrene food containers are intended for single use, cannot typically be recycled, and pose harm to marine life. The toxins and heavy chemicals found in them are not compostable or biodegradable--taking 500 years or more to decompose. Polystyrene food containers, as well as other single use foam products, create an overabundance of waste that continually overflow local landfills, overflow our beaches, and are not a source of clean energy when burned at H-Power. There are alternatives for single use polystyrene food containers, including compostable and biodegradable options. By reducing single use plastics like polystyrene food containers at the source, Hawai'i will have the opportunity to reduce and even eliminate one of the most toxic plastic pollutants, thereby showcasing its state sustainability goals to the nation and the world. Banning the distribution and selling of polystyrene food containers will enable Hawai'i to invest in the future aesthetics of the island, and more importantly the health and safety of marine life and local communities.

We urge the Committee to pass this measure, which will serve our collective efforts to keep Hawai'i's land, freshwater bodies, and oceans free of plastic pollution as well as protect the health of our people.

Thank you very much for this opportunity to provide testimony in support of SB 11.

Mahalo, Lori Mallini Volunteer, Sierra Club of Hawai'i <u>SB</u>-11

Submitted on: 2/5/2019 9:46:53 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|---|-----------------------|-----------------------|
| Eric Wong | Testifying for Loco Moco Drive Inn - Ewa Beach and Wiki Wiki Drive Inn - Waterfront Plaza | Oppose | No |

Comments:

Senate AEN/CPH Hearing – Weds Feb. 6, 2019

Re: Foam Foodservice Container Bans, SB 11 - Oppose

Aloha Senators:

First off, thank your consideration of my written testimony, name is Eric Wong and I am the co-owner of the Wiki Wiki Drive Inn, a small take out window located in the Downtown's Waterfront Plaza and the Loco Moco Drive Inn at the Ewa Beach Shopping Center.

Many of our customers know us in both location as an affordable spot for 'plate lunch', yes — 'cheap eats' thus we use Styrofoam® containers extensively for our customers come in. We hardly see 'sit down' dining as much as our 'take out'.

It's no secret that Styrofoam® containers are sturdy enough for insulation to keep the plate lunch hot, easy to open and eat immediately, and of course it is relatively inexpensive.

Other containers which are available do not insulate as well nor can it be 'piled on', Like others that have expressed their concern, we too is a 'mom and pop' small, family oriented businesses have a hard time as it is keeping our costs low and affordable, and with always rising rents, always rising ingredient prices, and now the possibility of paying even more for take out containers.

The hurdle we have to get over gets higher and higher every year. We are not one of your corporate restaurants who have deep pockets, we are the small, personable, flavorful restaurants that make Hawaii what it is, a place where people can enjoy different flavors from many cultures. By doing away with Styrofoam, it might prove to be the straw that broke the camel's back for many small businesses.

Please DO NOT ban foam containers as it will affect most local businesses around the State. I agree and surmise that while there are ecological reasons but there has to be some other way to resolve the problem without a rash and ultimate ban.

Ask yourself this- will small restaurant owners be capable of taking another added cost? How would you feel if your favorite take-out restaurant that you've been going to for years, just permanently closed shop? We have been in business nearly 25 years supporting our families and our 12 employees'. Approving this band against Styrofoam ® would affect many small food operators around Hawai'l and may force us to close, thus I humbly ask that you vote against the ban.

Sincerely,

Eric S.S. Wong

Imperial Investment, LLC. d.b.a.

Loco Moco Drive Inn-Ewa Beach and

Wiki Wiki Drive Inn- Waterfront Plaza

(808) 371-0016

<u>SB-11</u>

Submitted on: 2/5/2019 11:36:04 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|------------------------------------|-----------------------|-----------------------|
| John Harder | Testifying for Zero Waste Kauai | Support | No |

Comments:

Aloha my name is John Harder and I am submitting testimony on behalf of myself and Zero Waste Kauai in **strong support** of SB11, which will prohibit the sale of polystyrene foam containers and serving prepared foods using polystyrene foam containers. Polystyrene foam is one of the most littered and difficult to recycle forms of plastic. The excuse and myth of it being recycled needs to end this year.

Zero Waste Kauai is a local group promoting Sustainable Resource Management on Kauai and has been a partner in the Surfrider Foundations Ocean Friendly Restaurant program.

The Ocean Friendly Restaurants (OFR) program was launched in April 2016 and in a matter of 3 short years has been successful in encouraging over 200 restaurants in Hawaii make the commitment to go without polystyrene foam containers.

The OFR program has successfully helped restaurants become polystyrene-free with owners who want to do good and operate on a sustainable business model. None of these restaurants have reported financial burden from going foam-free and there is a community of volunteers who help make the transition easy and cost effective for the restaurants.

The economic benefit of the polystyrene ban also extends beyond restaurant owners, as many of Hawaii's main suppliers of compostable food-grade products are Hawaiian-based businesses, such as Jimmy's Sales (Kauai), Ventures Associates (Kauai), and Sustainable Island Products (Big Island).

Companies like these, as well as the over 200 Ocean Friendly Restaurants across the state, are local businesses providing quality service to residents and visitors by being conscious of the food they serve as well as the containers they come in. Supporting these purveyors supports local business owners.

As a regular and long time participant in numerous Highway and Shoreline cleanup projects, I can attest to the growing amount of polystyrene dumped along our highways and beaches; the difficulty in collecting the numerous small pieces of the plastic

scattered throughout the roadside environment, and the visual impact of improperly disposed of polystyrene on our residents and tourist population.

In addition, polystyrene (often known under the brand name Styrofoam) is one of the most polluting plastics to produce, and those of us who permit the sale and use of the product must accept the responsibility for release of toxic chemicals in other communities.

SB11 is a step in the right direction to protect the environment, support Hawaii's resiliency goals, and ensure the longevity and continued success of our local economy. Hawaii is ready for a future without Polystyrene foam. Mahalo for your consideration of this testimony and of this important issue.

Mahalo, John Harder, President, Zero Waste Kauai

"If you're not for **Zero** Waste, how much waste **Are** you for?"

Weds. Feb 6, 2019 - Hearing Senate Committee on Agriculture and Environment Senate Committee on Consumer Protection and Commerce

SB 367, SB 522, SB 11 - Oppose

Chair Gabbard. Chair Baker and members of the Committees:

My name is Mark Ushijima and I am a partner in the Hibachi Kailua. I am strongly against a ban on styrofoam containers in Hawaii. This will truly impact the small businesses in Hawaii. We already have high overhead costs (labor, electricity, taxes, fees, lease rent, etc...) that adding to our cost of goods would be very detrimental.

I also have a small business with my friend in Washington State. Washington State did not impose a ban on styrofoam but they strongly discourage styrofoam. They understand the importance of small businesses in Washington.

State legislators should review the Honolulu City Auditor's Study (which I participated in) about Single Use Polystyrene Food Containers and Plastic Bags.

http://www.honolulu.gov/rep/site/oca/oca_docs/PS_Ban_Study_Final_Report.pdf

The City Auditor finds that the majority of litter observed was miscellaneous items, and food service items mainly of non-polystyrene material that would remain unaffected by a ban.

Since there are no reusable alternative food containers, the ban will only change the material of the container, and that substitute container will become litter. Customers sometimes bring in personal reusable containers but many do not know that is against the law due to safety and hygiene reasons.

Focusing on styrofoam and only one type of plastic, that is not a big part of the waste stream, doesn't make sense. Someone should look at all the plastics from retail chips to juice pouches to frozen food bags—just walk through a grocery store. Some of these like potato chip bags are littered on streets, parks and beaches far more than foam food containers. I don't understand this. There are so many other plastic litter why go after a economical, useful product that's not even a major part of the litter problem.

Please do not pass this law. Not only will it affect the business owners but it will also affect the employees who work tirelessly for higher wages.

Thank you,

Mark Ushijima the Hibachi 515 Kailua Road Kailua, HI 96734 thehibachihawaii@gmail.com <u>SB-11</u>

Submitted on: 2/4/2019 7:25:50 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------------|---|-----------------------|-----------------------|
| Kimiko LaHaela Walter | Testifying for Hawai?i Reef and Ocean Coalition HIROC | Support | No |

Comments:

Aloha Chair Gabbard, Vice Chair Ruderman and members of the committee,

The HAWAI'I REEF AND OCEAN COALITION –HIROC– was formed in 2017 by coral reef scientists, educators, local Hawai'i environmental organizations, elected officials, and others to address a crisis facing Hawai'i's coral reefs and ocean, including harms from plastics.

Polystyrene foam containers are ultra-light, produce litter on land, and often are blown into the ocean, where they harm marine life, including sea birds, fish, mammals and even our precious corals that protect Hawai'i's shorelines. There are more sustainable alternatives to styrofoam that would involve only a small increase for consumers, with far less impact on our pristine environment. We must act now to protect our environment by reducing plastic and styrofoam use!

We strongly support this bill and urge its passage.

Mahalo,

Kimiko LaHaela Walter on behalf of the Hawai'i Reef and Ocean Coalition



SB 11 In Strong Support Hearing Date: February 6, 2019 Senate Committee on AEN

Aloha Chair Gabbard and Members of the Senate AEN Committee,

I am writing to you on behalf of the Surfrider Foundation's Oahu Chapter, in strong support of SB 11, relating to the phasing out of Polystyrene Foam Food containers in the State of Hawai'i.

We are at a critical juncture in our waste management and plastic pollution measures. The burdens of single use plastic are mounting around the world as the soup of plastics that has accumulated in our oceans is rapidly increasing. Additionally, the world's markets are closing in places where we have traditionally moved our waste. As an island we should be the leaders for the world in reducing these detrimental plastics like polystyrene foam.

A recent study published in the renowned journal of *Science* describes the mounting issues of plastics on our fragile and threatened reefs. The study describes corals as being 90% more likely to be diseased when plastic sits on the reef. The billions of pieces of plastic already in the ocean are scarring reefs and then likely infecting them with the contamination that comes from their properties. Plastics bio-accumulate toxins in the water and thus can transfer such toxins to other organisms like coral. This is yet another toxic consequence of plastics in our oceans, of which many more are described in the bullet points below.

As an organization that engages thousands of volunteers each year on the issues of plastic pollution through beach cleanups, educational info nights, and stream cleanups, Surfrider is extremely familiar with the detrimental effect these foam containers are having on our environment and ultimately our economy. Each year we see more and more plastics aggregating on our State, County, & City beaches and foam is one of the most found items during our beach cleanups. Polystyrene Foam, like plastic bags, has the characteristic of being extremely light and brittle – thus leading to its escape and nasty ability to break into smaller pieces in the environment. If it remains intact it clogs stormdrains and other runoff infrastructure and if it breaks into pieces, it can end up in the stomachs of many marine and stream creatures. These effects are all detrimental to the health of our ecosystems and leave an ugly scar on the landscape that provides the basis for our whole economy.

Through years of investigation and generating collective understanding of the issue, Surfrider and its partners have found an undeniable amount of evidence that points to banning

foam as a necessary step for our counties within our State to move forward in a sustainable way. Our State Department of Transportation Highways program recently identified foam and plastic bags as the two largest contributors to trash problems around our State. These are unnecessary materials that are costing our tax payers millions of dollars each year to clean up. The bullet points catalogued below highlight studies on Global, National, State, and County levels identifying the financial cost of plastics like foam to our economy.

Surfrider advocates for our Cities, Counties, and State to rethink the way they create, handle, and discuss waste. Our view is that we can become a leader in a regenerative economy in which we value reuse and recovery over the single-use items. Single-use plastics, like polystyrene foam, are a fossil fuel driven, carbon emitting industry that has no place in an island economy where space is limited and our environmental health is the most important issue to our economy. Alternatives to foam and other forms of plastic are easily accessible, with the most sustainable version being certified compostable products.

As the leading non-profit in Hawaii's Ocean Friendly Restaurants Program, Surfrider and its partners have certified over 175 hundred businesses around the State that illustrate that foam free is not only the right thing to do, but is an economically viable way to operate. Though the program is only a year old, the amount of restaurants demonstrating their ability to operate in this manner continues to not only grow, but be an incentive for customers to frequent the restaurants as our population understands more and more the destructive effects these types of plastics are having on our world.

While litter reduction campaigns should continue around the world, they are proving ineffective as a way of keeping plastic contamination out of our oceans. Despite efforts to stop litter the amount of plastic entering our oceans each year is rising exponentially, with predictions showing that by 2050 there will be more plastic by weight in the ocean than fish. Each step that me make towards taking these items out of circulation allows us to have a positive impact on reducing this toxic soup that is accumulating in our oceans.

The referenced bullet points below outline the economic, environmental, and human health impacts of foam to our islands.

Cleanup Costs & Economic Benefits

- Plastic is costing cities, counties, states, & countries millions of dollars and our global economy billions. Costs are passed to the taxpayers by burdening our storm water management systems with the need for expensive best management practices and the costs of cleanups.
- Hawaii State Department of Transportation has produced a trash plan that shows styrofoam and plastic bags as the top two contributors to the waste stream.¹
- The Natural Resource Defense Council (NRDC) created a plastic cleanup valuation study for 90+ counties in California:²

¹ http://www.stormwaterhawaii.com/swmp_wp/wp-content/uploads/2014/10/Trash-Reduction-Plan_FINAL-10-18-16.pdf

² https://www.nrdc.org/sites/default/files/ca-pollution-in-waterways-IB.pdf

- CA taxpayers are paying \$428 million per year to clean up plastic through storm drain management, street sweeping, and cleanups.
- San Diego County (with population of 1.3 equivalent to Hawaii) spends \$14
 million alone on plastic cleanup
- United Nations Environmental Program Global Estimates are in the billions for the global cost to cleanup plastics, \$14 billion for marine plastic alone.³
 - This cost is closer to \$78 billion annually if all costs are considered, including the cost lost in fossil fuel production and loss of resources.
- Burden on the public
 - According to cleanup hours recorded across Hawaii's beach cleaning organizations and volunteer hour base rates, we spent \$750,000 - \$1 million on beach cleanups in 2016 alone.

Environmental Impact

- It is argued that styrofoam is acceptable because we can incinerate it for energy. However, this approach is not without significant impacts. According to the Hawaii DOH Clean Air Branch the Covanta H-POWER plant emits 0.15 million metrics tons of carbon dioxide⁴ (a potent greenhouse gas) annually. Although touted as a "clean energy solution" for Hawaii, H-POWER only generates about 3% of Oahu's energy needs⁵ while still emitting greenhouse gases through burning plastic.
- Further, <u>for each ton of polystyrene not produced</u>, 2.5 metric tons of carbon dioxide emissions are avoided. This directly supports Hawaii's greenhouse gas reduction goals as stated in the Aloha + Challenge and as mandated by the US EPA.⁶
- The U.S. Environmental Protection Agency's Waste Reduction Model (WARM) report shows that burning polystyrene emits more carbon dioxide equivalent than other plastics. For each ton of polystyrene incinerated, 1.64 tons of carbon dioxide equivalent are emitted.
- If burned at HPower, one compostable clamshell burns 1.76 times greater energy compared to one EPS Foam clamshell of the same size. And burning compostable products comes without the toxic ash or smoke that EPS foam creates in the burning process.
- Fiber clamshells are also less than half the volume of EPS, so a restaurant could fit about twice as many clamshells on the same amount of shelf space or have more space for other things.

www.isiaiiupuise.org

 $^{^{3}}$ www.unep.org/pdf/ValuingPlastic/

⁴ http://energy.hawaii.gov/wp-content/uploads/2011/10/ghg-inventory-20081.pdf

⁵ www.**islandpulse**.org

⁶ https://www3.epa.gov/epawaste/conserve/tools/warm/pdfs/Plastics.pdf

- The material for fiber containers can be grown and then made here in Hawaii, so more
 jobs and sustainable ones, not jobs that are exposing workers directly to large amounts
 of toxic chemicals. EPS can also be made here, but raw, toxic source chemicals need to
 be shipped to Hawaii.
- EPS is designed to be used once, and according to the US EPA less than 1% of foam is recycled nationally. 0% of EPS Foam is recycled locally.
- According to the EPA Waste Reduction Model Report, 7% of plastic waste generation in US is polystyrene. Of our total plastic recovery, polystyrene makes up 0.7% of recycled plastic

Human Health

- Air pollution from polystyrene
 - Styrene is reasonably anticipated to be a human carcinogen and a confirmed animal carcinogen as reported by the National Institute of Health in their Report on Carcinogens (2011); this conclusion is also endorsed by the National Academy of Sciences (2014)⁷
 - When combusted, styrene produces benzaldehyde (US EPA classifies this as a hazardous substance), acetophenone (Group D carcinogen by US EPA, causes chromosomal damage on hamsters, but hasn't been tested in humans), styrene oxide (main metabolite of styrene, which is known as carcinogenic).

Surfrider Foundation deeply appreciates your time and energy in considering these important matters and is available to answer questions that you may have.

Mahalo,

Rafael Bergstrom
Oahu Chapter Coordinator, The Surfrider Foundation

⁷ https://www.niehs.nih.gov/health/topics/agents/styrene/index.cfm

<u>SB-11</u>

Submitted on: 2/5/2019 11:08:31 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|---|
| David Dinner | Individual | Support | No | 1 |

Comments:



Aloha my name is David Dinner and I am submitting testimony on behalf of the Surfrider Foundation â€∢Ocean Friendly Restaurants programâ€∢ inâ€∢ strong supportâ€∢ of SB11, to prohibit the sale of polystyrene foam containers and serving prepared foods using polystyrene foam containers. Polystyrene foam is one of the most littered and least recycled forms of plastic and we cannot even recycle it here in Hawaii. The excuse and myth of it being recycled needs to end this year.

To become an Ocean Friendly Restaurant, restaurants have to meet 7 mandatory criteria, one of which being No Polystyrene takeout containers (see full criteria list below). â€∢The Ocean Friendly Restaurants (OFR) program was launched in April 2016 and in a matter of 3 short years we have had over 200 restaurants in Hawaii make the commitment to go without polystyrene foam containers. The OFR program and local restaurants set the precedent for this movement, leading to the launch of the national OFR program in August 2017. There are now over 400 restaurants nationwide that meet the criteria and have joined as members.

The OFR program has successfully helped restaurants become polystyrene-free with owners who want to do good and operate on a sustainable business model. None of these restaurants have reported financial burden from going foam-free and there is a community of volunteers who help make the transition easy and cost effective for the restaurants.

The economic benefit of the polystyrene ban also extends beyond restaurant owners, as many of Hawaii's main suppliers of compostable food-grade products are Hawaiian-based businesses, such as Jimmy's Sales (Kauai), Ventures Associates (Kauai), and Sustainable Island Products (Big Island).

Companies like these, as well as the over 200 Ocean Friendly Restaurants across the state, â€⟨are local businessesâ€⟨ providing quality service to residents and visitors by being conscious of the food they serve as well as the containers they come in. Supporting these purveyors supports local business owners.

Furthermore, SB11 is a step in the right direction to protect the environment, support Hawaii's resiliency goals, and ensure the longevity and continued success of our local economy.

Hawaii is ready for a future without Polystyrene foam. Mahalo for your consideration of this testimony and of this important issue.



Criteria for Ocean Friendly Restaurants

Mandatory Criteria

- 1. No expanded polystyrene (EPS) foam is used.
- 2. Proper recycling practices are followed.
- Only reusable tableware is used in house and disposable utensils for takeout orders are

provided only upon request.

- 4. No plastic bags are offered for take-out or to-go orders.
- 5. Plastic straws are provided only upon request.

Optional Criteria (Choose at least two)

- 1. Discount is offered for customers with reusable cup, mug, bag, etc.
- 2. No beverages are sold in plastic bottles.
- 3. Food options: vegetarian/vegan food options are offered on a regular basis
- 4. All seafood must be a 'Best Choice' or 'Good Alternative' as defined by Seafood Watch

or certified as sustainable.

- 5. Water conservation efforts such as low-flow faucets and toilets, are implemented.
- 6. Energy efficiency efforts, such as LED lighting and Energy Star appliances, are in place.

Full List of Ocean Friendly Restaurants by Island

Maui



Monkeypod Kitchen Ka'anapali

Fleetwood's on Front St.

Paia Coffee & Bar

Kuau Store

Down The Hatch

Mama's Fish House

Burger Shack

Cheeseburger In Paradise Maui

Cheeseburger Grille And Tap Room Wailea

Ka'anapali Grille And Tap Room

Cool Cat Cafe

Mill House Maui

Frida's Mexican Beach House

Honu Seafood and Pizza

Surfside Woodfire Pizza Kitchen

Leilani's

Kimo's

Hula Grill Kaanapali

Duke's Beach House

Belle Surf Cafe

Captain Jack's Island Grill

Ka'ana Kitchen

Avelune's

Merriman's Fish House

Gourmet Pizza and Burgers by Merriman's

Big Island

Kaua'i

Big Island Brewhaus LLC

Magics Beach Grill

Brennecke's Beach Broiler

Opakapaka Grill and Bar

NOM Kauai

Holo Holo Charters

Midnight Bear Breads

Paco's Tacos Cantina Poipu

Little Fish Coffee

Monkeypod Jam

Duke's Kauai

Keoki's Paradise

EAT HEALTHY KAUAI

Oasis on the beach

Coconut's Fish Cafe Kauai

Kountry Kitchen Restaurant

Rainbeau Jo's

Kauai Beer Company

Mandala Living Foods

Mariachi's

The Fresh Shave

The Local Kauai

Kauai Island Brewing Company

The Spot Kauai

Kalaheo Cafe & Coffee Co.

The Beach House Restaurant

RumFire Poipu Beach

Anaina Hou Community Park

Fresh Bite Kauai

O'ahu



Cactus

Tap & Barrel by Lanikai Brewing Company

Barefoot Beach Cafe

Hiking Hawaii Cafe

Cheeseburger In Paradise Maui

Cheeseburger In Paradise Maui

Cheeseburger In Paradise Maui

Makana Market and Deli

Koko Head Cafe

Aloha Beer Co.

Morning Brew Cafe Kaka'ako

Pint and Jigger

Seascape Maalaea

Stewbum & Stonewall Brewing Co.

Waikiki Brewing Company

Waikiki Brewing Company

Kalapawai Cafe & Deli

The Nook Neighborhood Bistro

Ali'i Coffee Co.

Kani Ka Pila Grille

Coffee Shop 831

What it Dough

Peace Cafe

Duke's Oahu

Hula Grill

Lulu's Waikiki

Pioneer Saloon at Kakaako

Banzai Sushi Bar

Kona Brewing Company

12th Ave Grill

Wisp Hawaii

Aged Artisans DBA Square Barrels

Encore Saloon

Leahi Health

Hau Tree Lanai Restaurant

Sunrise Shack Waikiki

Merriman's Ward Village

Hideout

Horimasa Hawaii

Bevy

Highway Inn Kaka'ako

Makana Ranch House





SB11 RELATING TO POLYSTYRENE FOAM CONTAINERS

Senate Committee on Agriculture and Environment

<u>February 6, 2019</u> 1:45 p.m. Room 224

The Office of Hawaiian Affairs (OHA) Beneficiary Advocacy and Empowerment Committee will recommend that the Board of Trustees **SUPPORT** SB11, which would ban the sale of polystyrene food containers and their use by food providers, and thereby reduce the impacts of polystyrene waste on our native wildlife, marine and coastal resources, and associated Native Hawaiian traditional and customary practices.

Polystyrene has a well-established impact on native species of cultural significance, including endangered as well as subsistence resource species. An ubiquitous and dominant feature of the average consumer's food and retail experience, global production of polystyrene exceeds 300 million tons annually; approximately **50 percent** of that production is disposed indiscriminately into the environment, causing significant negative environmental impacts. In Hawaiian waters, the ingestion of discarded plastic debris including polystyrene by native seabirds, such as molī, as well as by endangered honu, is a well-documented phenomenon that may have highly injurious or even fatal consequences. Notably, such species hold special significance in Hawaiian culture and traditions: the cultural importance of seabirds includes their role in navigation, meteorology, craftwork, and in their spiritual symbolic significance; likewise, honu are also featured in numerous mo'olelo, hula, ki'i pōhaku, and other art forms, and were traditionally raised and harvested for food, medicinal, and other purposes. Polystyrene may also be ingested by other marine fauna, and its bioaccumulation through the food chain may adversely affect numerous other native and culturally significant marine species. Therefore, reducing or eliminating the amount of disposable polystyrene containers used in Hawai'i may help to mitigate the impact of plastics on the native and endangered marine species in our islands' waters.

OHA further notes that polystyrene plastics may also threaten the perpetuation of Native Hawaiian cultural and subsistence practices. The toxins contained in discarded polystyrene, including those found in polystyrene itself as well as toxins readily absorbed by polystyrene material, may bioaccumulate in the marine food chain, discouraging cultural and subsistence practitioners from the practice of gathering and consuming marine resources. The presence of polystyrene fragments and other microplastics in our nearshore waters may also discourage the traditional gathering and consumption of pa'akai and other non-living resources. In addition, the harm caused to endangered and native species may foreclose the future use of such species in Native Hawaiian traditional

and customary practices, which depend upon the availability of healthy and abundant resources. Finally, the presence of polystyrene and other plastics may compromise the cultural and spiritual integrity of the marine and coastal environment, upon which Native Hawaiian subsistence practices and ways of life are inextricably tied.¹ **Accordingly, reducing the use and inevitable disposal of polystyrene containers into our marine environment may also represent a small but important step towards the perpetuation of Native Hawaiian culture.**

Finally, while OHA understands and appreciates that economic concerns may be raised by some, OHA believes it may also be important to consider the economic benefits that would result from a ban on polystyrene foam containers. For example, a ban on polystyrene food containers, and the resulting reduction of plastic waste on our beaches and in our coastal waters, will only enhance visitor experience and thereby economic activity in the islands. The outward commitment by our government to prioritize and be responsive to the needs of Hawai'i's marine ecology would also be favorable to Hawai'i's image as an attractive visitor destination. A polystyrene container ban would further enhance the market for locally produced, environmentally friendly alternatives to polystyrene containers, injecting life into nascent sectors of our local economy and encouraging local, environmentally conscious entrepreneurship. Finally, the reduction of polystyrene's impacts on our marine and coastal environment, as well as on human health, may result in significant avoided economic costs associated with such impacts. OHA therefore urges the Committee to consider the significant economic benefits of a polystyrene ban in any weighing of the marginal increased costs of polystyrene-alternative food containers.

Therefore, OHA urges the Committee to **PASS** SB11. Mahalo nui for the opportunity to testify on this measure.

¹ In Native Hawaiian understanding the spatial bounds of 'āina and moana are viewed holistically and maintain powerful and epistemological connections to Hawaiian ancestry and resilience; in one salient example, hāko 'ako 'a, coral reefs, are prayed for and spoken of in the kumulipo, the Hawaiian creation chant.

<u>SB-11</u> Submitted on: 2/5/2019 1:29:02 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--|-----------------------|-----------------------|
| Melodie Aduja | Testifying for O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i | Support | No |

Beach Environmental Awareness Campaign Hawai'i

P.O. Box 25284 · Honolulu · Hawai'i · 96825 (808) 393 2168 · www.b-e-a-c-h.org

DATE: 5th February, 2019

TO: Chair Gabbard and Members of the Committee on Agriculture and Environment

FROM: Dean Otsuki, President, Beach Environmental Awareness Campaign Hawai'i

RE: TESTIMONY IN STRONG SUPPORT OF SB11

Relating to polystyrene foam containers

Committee hearing on Wednesday 6th February, 2019 at 1:45PM

Aloha Chair Gabbard and Members of the Committee on Agriculture and Environment,

I am writing on behalf of Beach Environmental Awareness Campaign Hawai`i (B.E.A.C.H.) in strong support of SB11 which bans the use and sale of polystyrene foam food and drink containers. B.E.A.C.H. strongly encourages the committee to pass this bill as is.

Polystyrene foam containers are very light, break into small pieces and can easily blow into the ocean where marine life can ingest them. Plastic in the ocean accumulates persistent organic pollutants (POPs) such as DDT, DDE, PCB's, and dioxins on the surface of the plastic up to a million times more than the surrounding sea water making the plastic very toxic. When marine life ingest plastic marine debris those POPs migrate to the fatty tissues of the animal. These POPs bioaccumulate up the food chain where the top of the food chain including humans get the most chemicals. POPs are endocrine disruptors that can interfere with the endocrine (or hormone) system. Endocrine disruptors can cause cancerous tumors, birth defects, and other developmental disorders.

There are better, healthier alternatives to polystyrene food containers like compostable containers. Compostable containers are 100% plant based so if they do get into the marine environment they will not harm marine life. Another alternative to polystyrene foam containers is to bring your own reusable containers.

Please protect marine life and the environment from polystyrene foam and accept this as written testimony in strong support of SB11.

Sincerely,

Dean Otsuki.

President,

B.E.A.C.H.

Aloha my name is Carol Wood owner of Coconunt's Fish Café, Kauai, and I am submitting testimony on behalf of the Surfrider

Foundation Ocean Friendly Restaurants program in strong support of SB11, to prohibit the sale of polystyrene foam containers and serving prepared foods using polystyrene foam containers. Polystyrene foam is one of the most littered and least recycled forms of plastic and we cannot even recycle it here in Hawaii. The excuse and myth of it being recycled needs to end this year.

To become an Ocean Friendly Restaurant, restaurants have to meet 7 mandatory criteria, one of which being No Polystyrene takeout containers (see full criteria list below). The Ocean Friendly Restaurants (OFR) program was launched in April 2016 and in a matter of 3 short years we have had over 200 restaurants in Hawaii make the commitment to go without polystyrene foam containers. The OFR program and local restaurants set the precedent for this movement, leading to the launch of the national OFR program in August 2017. There are now over 400 restaurants nationwide that meet the criteria and have joined as members.

The OFR program has successfully helped restaurants become polystyrene-free with owners who want to do good and operate on a sustainable business model. None of these restaurants have reported financial burden from going foam-free and there is a community of volunteers who help make the transition easy and cost effective for the restaurants.

The economic benefit of the polystyrene ban also extends beyond restaurant owners, as many of Hawaii's main suppliers of compostable food-grade products are Hawaiian-based businesses, such as Jimmy's Sales (Kauai), Ventures Associates (Kauai), and Sustainable Island Products (Big Island).

Companies like these, as well as the over 200 Ocean Friendly Restaurants across the state, are local businesses providing quality service to residents and visitors by being conscious of the food they serve as well as the containers they come in. Supporting these purveyors supports local business owners.

Furthermore, SB11 is a step in the right direction to protect the environment, support Hawaii's resiliency goals, and ensure the longevity and continued success of our local economy.

Hawaii is ready for a future without Polystyrene foam. Mahalo for your consideration of this

testimony and of this important issue.

Criteria for Ocean Friendly Restaurants

Mandatory Criteria

- 1. No expanded polystyrene (EPS) foam is used.
- 2. Proper recycling practices are followed.
- 3. Only reusable tableware is used in house and disposable utensils for takeout orders are provided only upon request.
- 4. No plastic bags are offered for take-out or to-go orders.
- 5. Plastic straws are provided only upon request.

Optional Criteria (Choose at least two)

- 1. Discount is offered for customers with reusable cup, mug, bag, etc.
- 2. No beverages are sold in plastic bottles.
- 3. Food options: vegetarian/vegan food options are offered on a regular basis
- 4. All seafood must be a 'Best Choice' or 'Good Alternative' as defined by Seafood Watch or certified as sustainable.
- 5. Water conservation efforts such as low-flow faucets and toilets, are implemented.
- 6. Energy efficiency efforts, such as LED lighting and Energy Star



Senator Mike Gabbard, Chair Sentor Russell E. Ruderman, Vice Chair Senate Committee on Agriculture and Environment

Re: SUPPORT of SB 11 – RELATING TO POLYSTYRENE FOAM CONTAINERS

Aloha Chair Gabbard, Vice Chair Ruderman and members of the Senate Committee on Agriculture and Environment,

Dolphin Quest strongly supports SB 11. This measure has the potential to reduce plastic-based pollution in the State of Hawaii and ultimately help protect our natural resources and human health.

One of Hawaii's greatest assets is its natural beauty. Unfortunately, plastic debris is one of the most common forms of litter found in Hawaii. We have seen this first-hand during Dolphin Quest's decades of participation in beach, stream, and highway clean-ups.

It is well known that plastic has a devastating effect on Hawaii's beaches, the marine ecosystem, wildlife, and human health. There is also growing concern about the negative impact marine debris may also have on tourism. It is essential that we get ahead of these problems through influential legislation just like this.

Ingestion, entanglement, and habitat degradation are just a few of the complex issues related to plastic pollution. Ingestion of micro-plastics has been observed at every trophic level, from large whales to even corals and zooplankton. High levels of plastic-based persistent organic pollutants (POPs) have been detected in the tissues of marine mammals, sharks, and other large predatory animals due to bioaccumulation and the biomagnification up the trophic system as results of this ingestion. Many of these POPs are known endocrine disrupters and there is growing evidence that humans may also be at risk. In addition to this, the plastic monomer used in manufacturing expanded plastic has been classified by the US National Institutes of Health and the International Agency for Research on Cancer as a possible human carcinogen. Unnecessary plastics need to be regulated for the health and well-being of all.

It is our duty and our responsibility to protect the land and water that allow us to thrive. We must safeguard the future of wildlife and our children so that all may have the opportunity to enjoy nature unadulterated. Supporting this measure would keep Hawaii at the forefront of conservation action and leadership.

Dolphin Quest is an organization of marine mammal specialists, animal advocates and ocean stewards with two business locations in Hawaii. We've championed public education, conservation, and scientific study related to marine mammals and our ocean for thirty years. This issue is critically important to us and we respectfully ask that you support SB 11.

Respectfully yours,

Store DV.M.

L. Rae Stone, DVM Dolphin Quest



Nicole Chatterson

Director, Zero Waste O'ahu

oahu.zerowaste@gmail.com

808.561.7730

February 5, 2019

Aloha Chair Gabbard and AEN Committee Members:

My name is Nicole Chatterson, and I am Mānoa resident writing in **strong support of SB 11**, to prohibit the sale of polystyrene foam containers.

Consumer demand has been undergoing a clear shift, globally and locally, away from polystyrene containers. This local success of and demand for polystyrene replacements is evidenced by the Unversity of Hawai'i's Māona campus wide polystyrene ban as well as through the recent passage of Maui County's polystyrene ban.

Single-use plastic consumption maintains on the current trajectory, **plastic use will account of 20% of our fossil fuel use by 2050¹.** While recycling and waste-to-energy are often cited as ways to deal with this plastic waste—we have recently seen that the recycling markets are too unstable to offer a consistent, sustainable solution to our waste. Compounding this, roughly 80% of the Global North's 'recyclable' plastics (exported from places like Hawai'i) are not recycled and instead escape into the marne environment.²

While we have the option to incinerate plastic for energy locally via H-POWER, this is also a flawed approach. Per megawatt, H-POWER produces 3 times more greenhouse gas emissions than Kahe—O'ahu's largest oil-based energy plant.³ Further, H-POWER requires 800,000 tons of waste annually to maintain operations and profit margins. This means that waste production is incentivized, driving more upstream impacts through the extraction, production, and transportation of products-turned-trash.

¹ UNEP (2018). SINGLE-USE PLASTICS: A Roadmap for Sustainability

² World Economic Forum (2015). The New Plastics Economy. Rethinking the future of plastics.

³ https://ghgdata.epa.gov/ghgp/main.do



According to the U.S. EPA, about 42% of the U.S. greenhouse gas footprint results from this production-disposal chain⁴.

If Hawai'i is indeed serious about our committment to the Paris Climate Accord and mitigating our climate footprint, it is clear that single-use plastic reduction is a necessary part of our climate change prevention tool-kit.

Plastic pollution reduction and movement away from a single-use economy are directly tied to the Aloha + Challenge goal to reduce our solid waste footprint and build sustainable communities. Further, plastic and single-use reduction also correspond to the following <u>United Nations Sustainable Development</u>

Goals, which have been adopted as a framework by the Hawai'i State Senate.

- SDG 12 = Responsible Production & Consumption
- SDG 13 = Climate Action
- SDG 14 = Life Below Water
- SDG 15 = Life on Land -

Mahalo for your time and consideration.

Nicole Chatterson

Director, Zero Waste O'ahu

⁴ https://www.epa.gov/smm/epa-sustainable-materials-management-program-strategic-plan-fiscal-years-2017-2022



Feb. 5, 2019

In Support of SB11 Relating to Polystyrene Food Containers House Committee on Agriculture and Environment Feb. 6, 2019, 1:45, Room 224

Aloha, Chair Gabbard, Vice Chair Ruderman and Members of the Committee:

As the Hawaii Manager of the Surfrider Foundation, I am writing in strong support of SB111 to prohibit the use of polystyrene food containers. With the support of Surfrider's five Chapters and thousands of members across Hawaii, we are committed to reducing the litter and environmental hazards of foam and other single-use plastics as part of our popular Rise Above Plastics campaign. We are also part of the Hawaii Reef & Ocean Coalition (HIROC), a group of coral reef scientists, environmental groups, businesses and educational groups, and this bill is one of our top priorities this session.

Polystyrene food containers are one of the most littered items in our Islands. They are also one of the most toxic forms of plastic, and Hawaii has one of the highest per capita uses in the country. Opponents will say it's recyclable, but the fact is that less than 1% is ever recycled. They will also say that it's a "litter problem," but the plastics industry has been using this tactic and blaming the public for decades without producing products that are actually recyclable. An EPS foam ban was implemented in San Francisco, and there was a 30% decrease in EPS litter within one year (San Francisco Street Litter Re-Audit, 2008). Over 110 cities and counties across the country have enacted EPS foam bans with dramatic decreases in litter. For an extensive list see: http://www.surfrider.org/pages/polystyrene-ordinances.

Industry lobbyists will also say that banning polystyrene food containers will hurt small businesses, but there are many restaurants that have dropped these products and are doing just fine. In fact, the new Ocean Friendly Restaurants Hawaii program has registered more than 200 restaurants that are foam-free in the last 20 months! Here's a partial list of all the restaurants in Hawaii: www.oceanfriendlyrestaurantshawaii.org.

During our monthly beach cleanups around the state, EPS foam products are among the top items we find every single time. In fact, as part of International Coastal Cleanup Day, 17,383 cups, plates and pieces of EPS foam were removed from Hawaii's beaches in a single day on Sat., Sept. 19, 2015! That's why we need this bill, which would help reduce these litter problems and environmental issues by requiring restaurants and food service vendors to stop using toxic EPS foam containers.

We embrace a policy of "1, 2, C," meaning products should be recyclable #1 & #2 plastics or compostable. There are many compostable or non-toxic plastic alternatives that can be recycled. Although foam products may be cheaper to buy, they have a hidden cost that counties and citizens have to pay to clean them up. A recent Hawaii Dept. of Transportation (HDOT) report stated that banning plastic bags and styrofoam would save millions of dollars for the state and help save the County millions as well.

Although the FDA approved EPS foam products in 1958, the science since then has shown that these are toxic products. Here are some reasons why EPS foam food service products are dangerous and wasteful: 1. EPS foam is a toxic form of plastic made from non-renewable fossil fuels and synthetic chemicals like styrene that leach out over time, especially in contact with hot, greasy or acidic food.



- 2. According to the National Institutes of Health (NIH), styrene is a dangerous carcinogen and neurotoxin that can lead to cancer, lymphoma and leukemia. The EPA says 100% of humans have styrene in their fat tissues.
- 3. Because EPS foam food service products are more than 90% air, they break apart easily and are often blown into our coastal areas and out to sea, where they are listed as one of the top 10 items collected at beach cleanups.
- 4. EPS foam never biodegrades but only breaks into smaller micro-plastics. These pieces act like sponges for toxic chemicals in the ocean and are consumed by marine creatures who mistake them for food. 660 marine species are known to ingest plastics, including endangered species like sea turtles and albatross. 5. Hawaii has one of the highest per capita rates of take-out food in the country, and many food containers are made of EPS foam products whose toxic chemicals threaten the health of humans & the environment. 6. A recent study in *Science* showed that plastics are a major cause of coral reef disease and decline, and our Islands are dependent on our coral reefs for seafood, ocean recreation and tourism.

Along with the facts above, there have been many scientific studies showing the harmful effects of polystyrene foam. That is why we don't want to delay taking action to reduce foam use and litter. In 2008, the Hawaii Senate passed SR78 SD1 to create a voluntary compliance program to switch from foam products to healthier alternatives, and both Maui and Hawaii Counties passed bills earlier this year to ban polystyrene food products.

The amount of testimony for these bills was overwhelmingly in favor of reducing polystyrene food containers. Though it's tempting to be swayed by the exaggerated claims of lobbyists for a few local foam producers and distributors, these same companies already carry and distribute more eco-friendly recyclable and compostable products because they see the writing on the wall. Scientific research and public sentiment have created a compelling case against foam products, and more than 110 cities and counties have already enacted successful foam bans. Polls show that most people in Hawaii support banning foam food products.

We appreciate that Hawaii's legislators have been environmental leaders in moving forward policies like the bills to ban plastic bags and create smoke-free parks & beaches. Now, we ask you to assert that same leadership on this issue. Because polystyrene food service products are toxic to the environment and human health, their use should be banned. There are many affordable alternatives that are non-toxic, biodegradable and pose no threats to the environment or human health and will cost the counties less to clean up.

Finally, with the bans in Maui and the Big Island, the states needs a consistent policy of eliminating these products. Protecting our land and people should be our top priority, not allowing a few companies to profit from outmoded products that harm the environment and our wildlife. Mahalo for your leadership on this issue.

Aloha, Stuart Coleman Stuart H. Coleman, Hawaii Manager Senate AEN/CPH and CPH Hearing, Weds. Feb. 6, 2019 SB367, SB522, SB11 - Oppose Bans on Polystyrene Food Service Products

Dear Senator Gabbard and Senator Baker,

I have a small restaurant in the airport area. Hawaii is a very tough place to own a business. A statewide ban on foam food service products will make it even harder. I try not to pass on too much of my business expense to customers because everything is so competitive and I will lose business if my food prices are raised too much.

I have looked at compostable containers and it doesn't work for my business. The good ones are too expensive. The lower cost ones do not work well; hot rice or other food, and even salad make the containers soggy. Customers don't like it when the rice sticks to the container or tastes like pulp.

Thank you

James Kin Jots Fast Food

2957 Koapaku Street (808) 833-7155

more 15 @ icloud. Lam

To: Hawaii State Senate Committees
Agriculture and Environment
Consumer Protection Health

From: Nabeya Maida

2919 Kapiolani Blvd ste 204 Honolulu, Hawaii 96826

Date: February 6, 2019 Hearing

Re: Foam Foodservice Container Ban Bills: SB 367, SB 522, SB 11

To whom it may concern,

My name is Kevin Suehiro, and I am the owner of Nabeya Maida, a small restaurant located in Kaimuki. We are a hot pot restaurant, so we use Styrofoam containers when our customers take home our broth. Styrofoam containers are good for insulation to keep the broth hot and are relatively inexpensive. Other containers which are available do not insulate as well, will be difficult to handle (due to the heat of the broths), and are in general very expensive compared to Styrofoam. We small, family oriented businesses have a hard time as it is keeping our costs low and affordable, and with always rising rents, always rising ingredient prices, and now the possibility of paying even more for take out containers, the hurdle we have to get over gets higher and higher every year. We are not one of your corporate restaurants who have deep pockets, we are the small, personable, flavorful restaurants that make Hawaii what it is, a place where people can enjoy different flavors from many cultures. By doing away with Styrofoam, it might prove to be the straw that broke the camel's back for many small businesses.

Please DO NOT ban foam containers as it will affect many, many local businesses in Hawaii. I know there are ecological reasons that exist, but there has to be some other way to resolve the problem without a rash and ultimate ban. When you walk around the island, before you make your decision, please take the time and think of how your decision will affect the community. Will small restaurant owners be capable of taking another punch to the gut? How would you feel if the small , hole in the wall restaurant that you've been going to for years, just closed up for good? This ban would negatively affect many small businesses in Hawaii, please vote against the ban.

Sincerely,

Kevin Suehiro Owner Nabeya Maida (808) 739-7739

Oppose SB 367, SB 522, SB 11

Weds. Feb 6, 2019 – Hearing

Senate Committee on Agriculture and Environment Senate Committee on Consumer Protection and Commerce

Dear Senators,

My name is Bryce Fujimoto and I am the VP at Shiro's Saimin. For the past 2 years we have been testing alternates to foam products. At this time the green alternatives do not retain hot and cold items effectively. In fact, some of the alternatives are dangerous because instead of being an insulator, they conduct heat. Being that they are hot to the touch from the outside a customer will be more likely to spill the contents and get burned while transporting.

Also, Hawaii currently has no means of composting green products. Thus, if I understand correctly on Oahu this will all be sent to H-Power to be burned anyway. This essentially will force smaller restaurants like us with already paper thin profit margins to use a much more expensive alternative without repurposing what the alternative was supposed to be used for.

The bottom line is why make the switch when we are not ready to do what we are supposed to do with the green containers? We need a more economical and safe alternative to foam products. Until then myself and Shiro's are pleading to stop bills that ban foam food containers. Thank you for your time. Sincerely,

Bryce Fujimoto #488-8824

Shiro's Saimin Haven 98-020 Kamehameha Highway #109 Aiea, Hawaii 96701



Testimony to the Senate Committee on Agriculture and Environment Wednesday, February 6, 2019 at 1:45 P.M. Conference Room 224, State Capitol

RE: SB 11, RELATING TO POLYSTYRENE FOAM CONTAINERS

Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **opposes** SB 11, which prohibits the sale of polystyrene foam containers and serving of prepared foods using polystyrene foam containers statewide effective July 1, 2020. This bill would also authorize the Department of Health to adopt rules to implement the prohibition and create a requirement for food vendors to educate their customers about proper disposal of nonreusable food containers and litter reduction.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

We **oppose** SB 11 because it will raise the cost for both business and consumers and will impact jobs in the local manufacturing industry of FDA approved, food-grade food service containers. Creating a mandate for the use of compostable and other plastic containers stifles the free market place, where businesses and consumers have the right to choose among the various types of safe, FDA approved food service containers.

Thank you for the opportunity to testify.

SB 367, SB 522, SB 11 – Oppose Foam Food Container Ban Bills Senate Committee on Agriculture and Environment Senate Committee on Consumer Protection and Commerce

Aloha Senators,

My name is Gwen Alejo-Herring. I am the owner and operator of the Queen Street Café & Grill in the Aiea Town Square.

My café prepares and sells plate lunches like kiawe grilled steak, firecracker chicken, ahi Belly and more. All entrees come with a choice of two scoops rice, garlic mash or brown rice, along with a choice of potato, mac or tossed salad.

We use foam food containers because it can handle the weight, moisture and retain the heat of our foods. My customers and I believe foam food container bans don't make sense because here on Oahu, foam food containers and even compostable containers all go to HPower for energy production. If there were a biodegradable/compostable plant, it then makes more sense for paying more for biodegradable containers.

I also provide lunch for schools. One school requires biogradable plates, which I find to be flimsy and I worry about if and when a child may get burned from hot lunches. Another school that I work with uses the foam plates. I notice that the biodegradable plates are double or more the price of the foam plates.

If a foam food container ban becomes law, I will need to raise prices and I worry about losing customers. Everyone is very price-conscious.

Please do not support these foam container ban bills.

Sincerely,

Gwen Alejo-Herring Queen Street Café & Grill 99-080 Kauhale Street Aiea, HI 96701 galejoherring@gmail.com SB367, SB522, SB11 - Oppose Bans on Polystyrene Food Service Products Senate AEN/CPH and CPH Hearing, Weds. Feb. 6, 2019

Dear Senator Gabbard and Senator Baker,

My name is Aaron Wolfe. I am a local male just starting out in the food business. I am the owner of HNA Food Services LLC (Tsukenjo's)

It's hard enough to make it in this business with all the expenses, insurance, hike in food costs etc...Let alone having to worry about higher cost of plates. I oppose these bills and believe government should leave us be. We have enough rules and regulations to abide by. Something like this could put us out of business.

If people are worried about trash getting out to the ocean, they should look at more clean up of homeless on the streets. I pay for my restaurant's bagged trash to be picked up street side. Many times the homeless rip open the bags and then I have to clean it up the next morning.

Aaron Wolfe HNA Food Services LLC dba: Tsukenjo's 1148 Bishop Street Hon, HI 96813

SB 11, Relating to Polystyrene Foam Containers Senate AEN Hearing Weds Feb 6, 2019 1:45 pm – Room 224 Position: Oppose

Chair Gabbard and Members of the Senate AEN Committee:

I am Dexter Yamada, President of KYD, Inc. dba: K. Yamada Distributors. KYD, Inc. is a local family run business that originated in the 1940's. Today, KYD, Inc and its sister company, Hawaii's Finest Products, LLC, manufacture packaging materials such as food-grade EPS (Expanded Polystyrene) food containers, and distribute a variety of packaging products, to include compostable containers.

As a kamaaina family business in Hawaii, we live here and care about our environment. We believe in stronger litter management programs that curtail land-based litter from migrating to waterways and the ocean. This means public education and consequences for proper disposal of litter and a call for civic responsibility.

We offer the following information for consideration as the Committee deliberates over SB 11:

PS foam food containers are no more harmful to fish and ocean wildlife than other manmade materials, and are not likely to become marine debris
 Marine debris is any manmade material that enters the marine environment. None of it belongs in our oceans regardless of what kind of material it is made of - whether wood, metal, plastic, or paper. A recent Ocean Conservancy study listed the most common types of litter that are found along the world's coastlines, based on data gathered during three decades of international coastal clean-up efforts. Fishing gear, balloons and plastic bags were estimated to pose the greatest entanglement risk to seabirds, sea turtles and marine animals. Plastic bags and plastic utensils ranked as the greatest threats for ingestion.

NOAA (National Ocean and Atmospheric Administration) states that the 5 most common items found during the International Coastal Cleanup are cigarette butts, food wrappers, plastic beverage bottles, plastic bottle caps, and plastic straws and drink stirrers. Plastics can enter into the ocean through ineffective or improper waste management, intentional or accidental dumping and littering on shorelines or at sea, or through storm water runoff. (Trash Talk: Marine Debris and Plastics, NOAA, Sept. 17, 2015)

Locally, the composition of ocean debris appears to be similar to NOAA's list of most common items. Anecdotal testimony from a Big Island marine biologist said that 25-89% of the island's ocean debris is land-based, predominantly straws, wrappers, insulation, shipping containers, hot coffee cups, meat trays, and saimin containers. EPS foam containers were about 1% of the debris. Although large foam block packaging, ice chests and coolers are often found in coastal cleanups, they are usually excluded from ban bills.

Banning Food Grade PS Foam Containers Will Not Reduce Litter

According to Steven Stein, an environmental scientist who studies litter, banning one material will not reduce the overall litter in waterways. "Food-service containers made of polystyrene are a minor component of litter and, because there is no reusable alternative, a ban simply will substitute other materials that also end up in our waterways." https://www.latimes.com/opinion/opinion-la/la-ol-polystyrene-food-takeout-containers-ban-20170628-story.html

On a local level, the Honolulu City Auditor's Single-Use Polystyrene Food Containers and Plastic Bag Study also conclude that polystyrene bans are not effective in reducing litter, and such containers are a minor component of litter. Like Stein, the Honolulu City Auditor states that because there is no reusable alternative, a ban simply substitutes other containers that will likely be littered. Both Stein and the City Auditor cite the California State Water Resources Board in its NPDES application noted that a ban of PS foam food containers resulted in the substitution of other products that were discarded in the same manner.

Personal reusable food containers are not a takeout option due to FDA regulations that restrict food service businesses from accepting personal, reusable consumer takeout containers due to sanitary and health reasons. Food container replacement for polystyrene containers, whether it is paper, fiber or plastic, would likely be littered in the same fashion. http://www.honolulu.gov/rep/site/oca/oca_docs/PS_Ban_Study_Final_Report.pdf

 Replacing PS foam carries significant and unnecessary costs to small locally-owned restaurants and lower-income consumers

As a local distributor of food packaging materials, polystyrene as well as alternative products, we find that polystyrene foodservice products are generally more economical to use than other disposable foodservice products and reusable food service items. The wholesale price of single-use polystyrene foodservice products is often approximately two to three times less than other single-use containers, and four to five times less than a comparable reusable foodservice item when the costs of equipment, labor, water, electricity, and detergent costs are included. This allows schools, hospitals and other institutions to make better use of their limited budgets. For example, local Hawaii pricing shows the average compostable 8 oz cup costs more than twice the average polystyrene cup. This means the razor thin profit margins under which restaurants operate will be cut even lower. This may well translate to rising costs to the consumer, our local citizens and the small business owners working all over the island.

The following is the City Auditor's data about estimated costs to business owners which will more than likely increase cost to consumers.

Exhibit 3.4 Monthly and Annual Cost Estimates for Non-Polystyrene Food Containers by Types of Restaurants

Source: OmniTrak and Office of City Auditor

| Туре | Monthly Cost Increase | Annual Cost Increase |
|------------------------------|-----------------------|-------------------------|
| | Estimate | Estimate (Monthly x 12) |
| Total: | \$ 294.64 | \$3,535.68 |
| Small Restaurant (1-10 | \$ 293.75 | \$3,525.00 |
| employees) | | |
| Medium Restaurant (11-50 | \$222.72 | \$2,672.64 |
| employees) | | |
| Large Restaurant (50 or more | \$420.00 | \$5,040.00 |
| employees) | | |

Rather than a statewide ban of EPS foam containers, we encourage discussion with the respective Counties, about solutions for managing land- based litter to prevent marine debris since the Counties are responsible for municipal solid waste management.

Thank you for the opportunity to present testimony.



TESTIMONY IN SUPPORT OF SB11, RELATING TO POLYSTYRENE FOAM CONTAINERS

Committee on Agriculture & Environment

Senator Mike Gabbard, Chair; Senator Russell E. Ruderman, Vice Chair February, 6, 2019 at 1:45pm in Conference Room 224.

Aloha Senators

Mahalo for your consideration of SB2498 SD2. My name is Natalie McKinney, Executive Director of the Kōkua Hawaiʻi Foundation. We are a 501(c)3 non-profit organization that supports environmental education in the schools and communities of Hawaiʻi. Our mission is to provide students with experiences that will enhance their appreciation for and understanding of their environment so they will be lifelong stewards of the earth. One of our many programs is the Plastic Free Hawaiʻi program. Plastic Free Hawaiʻi provides resources, tools, and trainings to educate schools, business partners, and community members about the environmental and health benefits of going plastic free to minimize single-use plastics in our islands.

Since the beginning of this program, it has been our goal to inspire the keiki of Hawai'i to make changes in their own lives to eliminate single-use plastics like EPS foam and ask the same change from their friends, parents, neighbors, and community. Working with these youth in beach cleanups, panel discussions, environmental fairs, we hear the same question repeated: "why?" They ask why a product like foam, that we know to be toxic to people, animals, and the entire ecosystem, should still be available. These youth are moved to make change, and we ask the same of our legislators.

The urgency of the plastic pollution crisis calls for us to take bold steps toward removing the "low hanging foam fruit" of single use plastics from distribution. Cutting off the flow is the only true way to ensure that these toxic materials never enter our watersheds. Kōkua Hawai'i Foundation will continue working tirelessly to encourage behavior change, but we are just one determined group. We need government and state agencies to take an active role in protecting this place that we love.

Mahalo for your time and consideration.

Natalie McKinney, Executive Director

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<u>SB-11</u> Submitted on: 2/5/2019 11:20:00 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-------------------|---|-----------------------|-----------------------|
| Christian Robbins | Testifying for Kokua Hawaii Foundation | Support | No |



<u>SB-11</u> Submitted on: 2/6/2019 12:32:49 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|-------------------------------------|-----------------------|-----------------------|
| Ken Sentner | Testifying for Surfrider Foundation | Support | No |

Comments:

Aloha Legislators,

Please follow the lead of Maui and Hawaii counties and help curb the spread of noxious foam pollution of our land and ocean. Testimonies from these counties indicate the successful accommodation of businesses to these efforts to protect our natural environment, upon which our tourism economy depends.

Mahalo,

Ken Sentner

2499 Kapiolani Blvd., Apt. 2209

Honolulu, HI 96826



TESTIMONY OF TINA YAMAKI PRESIDENT RETAIL MERCHANTS OF HAWAII February 6, 2019

Re: SB 11 Relating to Polystyrene Foam Containers

Good afternoon Chairperson Gabbard and members of the Senate Committee on Agriculture & Environmental. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii (RMH) as founded in 1901 and is a statewide, not for profit trade organization committed to the growth and development of the retail industry in Hawaii. The retail industry is one of the largest employers in the state, employing 25% of the labor force.

The Retail Merchants of Hawaii OPPOSES SB 11 Relating to Polystyrene Foam Containers. Bans are not the simple answer. We need to maintain a fair balance regarding food service containers and look at a coordinated litter reduction programs.

Businesses respond to the wants of the customers that patronize their establishments all while operating on a very thin profit margin. They look for cost effective food containers that ensure that products are durable enough to protect people from spills and burns as well as keep food protected and fresh longer by sustaining appropriate temperature.

A mere substitution of polystyrene type containers to another type will NOT result in reduced trash as more than likely the substitution product would be discarded in the same manner as the polystyrene. We need to be looking into a comprehensive litter reduction program that includes government and the community that not only takes into account educating the public, but also looking for alternative solutions like public trash cans that are designed so that it will keep its content from flying out.

We also want to point out that the alternative products often creates more waste in volume and energy as well as increase air and water pollution – in the manufacturing of, in the transportation to the business.

We also question why we want to violate interstate commerce by banning the sale of prepackaged food that come in Styrofoam containers items like that of Cup of Noodle.

We urge you to hold this measure. Mahalo again for this opportunity to testify.

<u>SB-11</u> Submitted on: 2/5/2019 9:36:45 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--|-----------------------|-----------------------|
| Kahi Pacarro | Testifying for Sustainable Coastlines Hawaii | Support | No |

Comments:

Polystyrene is the epitomy of contradiction for putting Hawaiian food in. The most sustainable food in the most unsustainable type of container. It's time to stop this hypocrisy.

<u>SB-11</u> Submitted on: 1/28/2019 5:54:55 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|--------------|-----------------------|-----------------------|
| John R. Gordines | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/29/2019 3:41:08 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Randy Gonce | Individual | Support | Yes | |

<u>SB-11</u>

Submitted on: 1/29/2019 10:24:53 AM Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Joy Bitonio | Individual | Support | No |

Comments:

Aloha Honolulu County Council Members,

I am writing to you as a resident of Kaneohe, HI and a member of Surfrider Foundation's Oahu Chapter, in strong support of SB11, relating to the ban of Polystyrene Foam Food containers on the island of Oahu.

We are at a critical juncture in our waste management and plastic pollution measures. The burdens of single use plastic are mounting around the world as the soup of plastics that has accumulated in our oceans is rapidly increasing. Additionally, the world's markets are closing in places where we have traditionally moved our waste. As an island we should be the leaders for the world in reducing these detrimental plastics like polystyrene foam.

A recent study published in the renowned journal of *Science* describes the mounting issues of plastics on our fragile and threatened reefs. The study describes corals as being 90% more likely to be diseased when plastic sits on the reef. The billions of pieces of plastic already in the ocean are scarring reefs and then likely infecting them with the contamination that comes from their properties. Plastics bio-accumulate toxins in the water and thus can transfer such toxins to other organisms like coral. This is yet another toxic consequence of plastics in our oceans, of which many more are described in the bullet points below.

As an organization that engages thousands of volunteers each year on the issues of plastic pollution through beach cleanups, educational info nights, and stream cleanups, Surfrider is extremely familiar with the detrimental effect these foam containers are having on our environment and ultimately our economy. Each year we see more and more plastics aggregating on our State, County, & City beaches and foam is one of the most found items during our beach cleanups. Polystyrene Foam, like plastic bags, has the characteristic of being extremely light and brittle – thus leading to its escape and nasty ability to break into smaller pieces in the environment. If it remains intact it clogs stormdrains and other runoff infrastructure and if it breaks into pieces, it can end up in the stomachs of many marine and stream creatures. These effects are all detrimental to the health of our ecosystems and leave an ugly scar on the landscape that provides the basis for our whole economy.

Through years of investigation and generating collective understanding of the issue, Surfrider and its partners have found an undeniable amount of evidence that points to banning foam as a necessary step for our counties within our State to move forward in a sustainable way. Our State Department of Transportation Highways program recently identified foam and plastic bags as the two largest contributors to trash problems around our State. These are unnecessary materials that are costing our tax payers millions of dollars each year to clean up. The bullet points catalogued below highlight studies on Global, National, State, and County levels identifying the financial cost of plastics like foam to our economy.

Surfrider advocates for our Cities, Counties, and State to rethink the way they create, handle, and discuss waste. Our view is that we can become a leader in a regenerative economy in which we value reuse and recovery over the single-use items. Single-use plastics, like polystyrene foam, are a fossil fuel driven, carbon emitting industry that has no place in an island economy where space is limited and our environmental health is the most important issue to our economy. Alternatives to foam and other forms of plastic are easily accessible, with the most sustainable version being certified compostable products.

As the leading non-profit in Hawaii's Ocean Friendly Restaurants Program, Surfrider and its partners have certified over 140 hundred businesses around the State that illustrate that foam free is not only the right thing to do, but is an economically viable way to operate. Though the program is only a year old, the amount of restaurants demonstrating their ability to operate in this manner continues to not only grow, but be an incentive for customers to frequent the restaurants as our population understands more and more the destructive effects these types of plastics are having on our world.

While litter reduction campaigns should continue around the world, they are proving ineffective as a way of keeping plastic contamination out of our oceans. Despite efforts to stop litter the amount of plastic entering our oceans each year is rising exponentially, with predictions showing that by 2050 there will be more plastic by weight in the ocean than fish. Each step that me make towards taking these items out of circulation allows us to have a positive impact on reducing this toxic soup that is accumulating in our oceans.

The referenced bullet points below outline the economic, environmental, and human health impacts of foam to our islands.

Cleanup Costs & Economic Benefits

 Plastic is costing cities, counties, states, & countries millions of dollars and our global economy billions. Costs are passed to the taxpayers by burdening our storm water management systems with the need for expensive best management practices and the costs of cleanups.

- Hawaii State Department of Transportation has produced a trash plan that shows styrofoam and plastic bags as the top two contributors to the waste stream.[1]
- The Natural Resource Defense Council (NRDC) created a plastic cleanup valuation study for 90+ counties in California:[2]
 - CA taxpayers are paying \$428 million per year to clean up plastic through storm drain management, street sweeping, and cleanups.
 - San Diego County (with population of 1.3 equivalent to Hawaii) spends
 \$14 million alone on plastic cleanup
- United Nations Environmental Program Global Estimates are in the billions for the global cost to cleanup plastics, \$14 billion for marine plastic alone.[3]
 - This cost is closer to \$78 billion annually if all costs are considered, including the cost lost in fossil fuel production and loss of resources.
- Burden on the public
 - According to cleanup hours recorded across Hawaii's beach cleaning organizations and volunteer hour base rates, we spent \$750,000 - \$1 million on beach cleanups in 2016 alone.

Environmental Impact

- It is argued that styrofoam is acceptable because we can incinerate it for energy. However, this approach is not without significant impacts. According to the Hawaii DOH Clean Air Branch the Covanta H-POWER plant emits 0.15 million metrics tons of carbon dioxide[4] (a potent greenhouse gas) annually. Although touted as a "clean energy solution" for Hawaii, H-POWER only generates about 3% of Oahu's energy needs[5] while still emitting greenhouse gases through burning plastic.
- Further, for each ton of polystyrene not produced, 2.5 metric tons of carbon dioxide emissions are avoided. This directly supports Hawaii's greenhouse gas reduction goals as stated in the Aloha + Challenge and as mandated by the US EPA.[6]
- The U.S. Environmental Protection Agency's Waste Reduction Model (WARM)
 report shows that burning polystyrene emits more carbon dioxide equivalent than
 other plastics. For each ton of polystyrene incinerated, 1.64 tons of carbon
 dioxide equivalent are emitted.
- If burned at HPower, one compostable clamshell burns 1.76 times greater energy compared to one EPS Foam clamshell of the same size. And burning compostable products comes without the toxic ash or smoke that EPS foam creates in the burning process.
- Fiber clamshells are also less than half the volume of EPS, so a restaurant could fit about twice as many clamshells on the same amount of shelf space or have more space for other things.
- The material for fiber containers can be grown and then made here in Hawaii, so more jobs and sustainable ones, not jobs that are exposing workers directly to

large amounts of toxic chemicals. EPS can also be made here, but raw, toxic source chemicals need to be shipped to Hawaii.

- EPS is designed to be used once, and according to the US EPA less than 1% of foam is recycled nationally. 0% of EPS Foam is recycled locally.
- According to the EPA Waste Reduction Model Report, 7% of plastic waste generation in US is polystyrene. Of our total plastic recovery, polystyrene makes up 0.7% of recycled plastic

Human Health

- Air pollution from polystyrene
 - Styrene is reasonably anticipated to be a human carcinogen and a confirmed animal carcinogen as reported by the National Institute of Health in their Report on Carcinogens (2011); this conclusion is also endorsed by the National Academy of Sciences (2014)[7]
 - When combusted, styrene produces benzaldehyde (US EPA classifies this as a hazardous substance), acetophenone (Group D carcinogen by US EPA, causes chromosomal damage on hamsters, but hasn't been tested in humans), styrene oxide (main metabolite of styrene, which is known as carcinogenic).

I appreciate your time and energy in considering these important matter for the sake of today and future generations to come in the effort to maintain the beauty of this island and planet we call home.

[1] http://www.stormwaterhawaii.com/swmp_wp/wp-content/uploads/2014/10/Trash-Reduction-Plan_FINAL-10-18-16.pdf

- [2] https://www.nrdc.org/sites/default/files/ca-pollution-in-waterways-IB.pdf
- [3] www.unep.org/pdf/ValuingPlastic/
- [4] http://energy.hawaii.gov/wp-content/uploads/2011/10/ghg-inventory-20081.pdf

- [5] www.islandpulse.org
- [6] https://www3.epa.gov/epawaste/conserve/tools/warm/pdfs/Plastics.pdf
- [7] https://www.niehs.nih.gov/health/topics/agents/styrene/index.cfm

<u>SB-11</u>

Submitted on: 1/29/2019 11:22:20 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-----------------|--------------|-----------------------|-----------------------|--|
| Shane Albritton | Individual | Support | No | |

Comments:

Aloha Chair Gabbard, Vice Chair Ruderman, and committe members.

My name is Shane Albritton; I'm a public school teacher in Kaimuki.

I'm writing to urge you to support SB11, for the sake of our children, our environment and our economy.

I'm originally from Maui, which banned single use plastic bags a few years ago and recently banned polystyrene food containers.

I can tell you that these changes have had a tremendously positive impact. The fence leeward of the dump in central Maui used to be permanently covered in plastic bags blowing in the wind, and now, you don't see plastic anywhere.

By contrast, Honolulu's streams are full of polystyrene and plastic waste, which eventually work their way down into the ocean, into the fish, and into our own bodies.

Please take this bold step toward protecting Hawaii's future. Please support SB11.

Mahalo,

Shane Albritton

<u>SB-11</u> Submitted on: 1/29/2019 1:32:26 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|---|
| Lois Crozer | Individual | Support | No | Ī |

Comments:

Polystyrene containers are an ecological nightmare. There are plenty of replacements available that break down easier and are reasonably priced. It's time to be cognizant of our buying choices in regards to our aina.

<u>SB-11</u> Submitted on: 1/30/2019 12:28:58 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--|-----------------------|-----------------------|
| Alden | Testifying for Kaiser High School Wipeout Crew | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:26 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--|-----------------------|-----------------------|
| Paul Balazs | Testifying for Department of Education | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:26 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Lawrence Komo | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:26 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|-----------------------------|-----------------------|-----------------------|
| Isa | Testifying for Wipeout Crew | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:27 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------------|-----------------------------|-----------------------|-----------------------|
| emily ramirez miranda | Testifying for wipeout crew | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:30 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------------------------------|-----------------------|-----------------------|
| Lei Shimabukuro | Testifying for Kaiser High School | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:38 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| cassidy | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:39 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--|-----------------------|-----------------------|
| Conrad Morgan | Testifying for Kaiser High School Wipeout Crew | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:29:54 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Nanea Kay | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:30:17 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|--------------|-----------------------|-----------------------|
| Jayna Westbrooks | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:30:28 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--|-----------------------|-----------------------|
| Kamryn Conway | Testifying for Wipeout Crew Kaiser High School | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:31:33 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Jordan May | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:32:11 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Jourdin W | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:33:12 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Ashtyn Cummings | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:38:33 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|----------------------------|-----------------------|-----------------------|
| Thomas Osa | Testifying for Wipeoutcrew | Support | No |

<u>SB-11</u> Submitted on: 1/30/2019 12:44:04 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Sarah Haberman | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/31/2019 12:03:07 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------------|--------------|-----------------------|-----------------------|
| Lauren DelaCalzada | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/31/2019 9:37:18 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| hunter | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/31/2019 9:57:10 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|------------------|--------------|-----------------------|-----------------------|--|
| Jennifer Bufford | Individual | Support | No | |

Comments:

Hi my name is Jennifer Bufford I am 13 years old,

and I vote yes on this ban

I am testifying today on behalf of the next generation. If we do not start to do something about acess Ploystyrene we will no longer have some things we love. I love Hawaii and dont want a simple thing like Ploystyrene to take it over please help us do something about it.

simply - worried for my life

<u>SB-11</u> Submitted on: 1/31/2019 12:37:14 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------------|--------------|-----------------------|-----------------------|
| Lillian Renfro-Robeau | Individual | Support | No |

Comments:

I'm writing in strong support of SB11, which will ban polystyrene containers statewide. Our oceanic environments have been severely polluted by non-biodegradable plastics and we must take strong action to prevent further exposure of marine life to these plastic hazards. Additionally, polystyere is a known human neurotoxin and should be promply removed from the human food cahin. Alternatives to plastic already exist and companies will be more inclined to use them when bans like this are in place.

Mahalo for your time and consideration.

<u>SB-11</u> Submitted on: 1/31/2019 3:57:31 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Dyson Chee | Individual | Support | No |

Comments:

As a 16 year old high schooler I strongly support SB 11. SB 11 will help to show that the State of Hawaii is committed to being green and preserving this Earth for future generations. Please pass SB11. Mahalo.

<u>SB-11</u> Submitted on: 1/31/2019 4:36:11 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-----------------|--------------|-----------------------|-----------------------|--|
| David Jones, MD | Individual | Support | No | |

Comments:

As a local physician and surfer, I support SB11. Polystyrene is not safe for our environment, for marine animal health or for human health. Please pass this bill.

Respectfully, David R Jones, MD

<u>SB-11</u> Submitted on: 1/31/2019 4:40:44 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|------------------|--------------|-----------------------|-----------------------|--|
| Kathleen Elliott | Individual | Support | No | |

Comments:

As a local health care provider and ocean swimmer, I support SB11. Polystyrene is not safe for our environment, for marine animal health or for human health. There are other materials that are more environmentally friendly than polystyrene and plastic.

Please pass this bill.

Aloha, Kathleen Elliott, RN, PA-C

Honolulu

SB-11

Submitted on: 1/31/2019 7:27:32 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Mio Chee | Individual | Support | No |

Comments:

First off, please excuse any grammatical errors and/or misspellings as English is my second language. I moved here on Oahu more than 20 years ago from Tokyo, Japan. The amount of polystyrene trash I see now compared to 21 years ago has increased tremendously. I have two boys who are very concerned about the local environment. They are only 13 and 16. We go to the beaches, parks, and hiking trails often and the amount of polystyrene trash we see and pick are sickning, Since they break down in small pieces, they are so hard to collect. Our beaches are getting full of plastic trash and I feel that one day tourists may decide not to come to Hawaii because of the way they look. Who wants to spend thousands of dollars to spend their vacation where polystyrene food containers, plates, and cups are everywhere? We have been avoiding some of these beaches simply because there are too many plastic rubbish including polystyrene. We have many environmentally friendly alternatives to polystyrene and plastics nowadays and it is our responsibility to leave a healthier and cleaner land and ocean for our future generations. Although our family bring our own containers, utensils, and bottles whenever we eat out and we attend events where food is served, the amount of polystyrene our family is reducing is so little. To tackle this huge issue, we need to work together. I moved here 21 years ago because of the clean air, clean land and clean ocean. However, Hawaii is no longer the same. I am saddened to see how Hawaii looks now. Let's pass this bill and do our share for our future generations.

Mahalo for taking the time to read my testimony.

Mio Chee

Ala Moana Resident

<u>SB-11</u> Submitted on: 1/31/2019 7:29:36 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| David Chee | Individual | Support | No |

<u>SB-11</u> Submitted on: 1/31/2019 7:31:02 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Micah Chee | Individual | Support | No | |

Comments:

Please pass this SB11!!

<u>SB-11</u> Submitted on: 1/31/2019 10:20:30 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Debbie Millikan | Individual | Support | No |

<u>SB-11</u> Submitted on: 2/1/2019 11:20:21 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-----------------|--------------|-----------------------|-----------------------|--|
| susan chouljian | Individual | Support | No | |

Comments:

We need to eliminate styrofoam because it breaks down into a nonbiodegradable plastic which is bad for both the environment and human health. There are many biodegradable food container alternatives on the market these days which could be used instead.

Respectfully,

Sue Chouljian

<u>SB-11</u> Submitted on: 2/1/2019 4:52:21 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|---|-----------------------|-----------------------|
| Cathy Goeggel | Testifying for Animal Rights Hawai'i | Support | No |

<u>SB-11</u> Submitted on: 2/2/2019 8:26:11 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Fawn Liebengood | Individual | Support | No |

<u>SB-11</u> Submitted on: 2/2/2019 9:24:00 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Suyin Phillips | Individual | Support | No |

<u>SB-11</u>

Submitted on: 2/4/2019 9:42:39 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-------------------|--------------|-----------------------|-----------------------|---|
| Kalamakahi Crabbe | Individual | Support | No | Ī |

Comments:

I am Kalamakahi Crabbe a 7th grader at SEEQS charter school. I would love to support SB 11 because this bill if passed can clean up Hawai'i, restore it to it's natural state, help marine and land animals thrive much better. Because if we encourage the use of polystryene we are encourgaing the death of our 'aina and we as hawai'i get lots of money from turism and if we trash hawai'i and make it look like a landfill we won't get enough of that money and kill our land. And me as a student/keki does not want that to happen, I don't that to happen I don't want to see my home become trashed because it is convient for resturants to buy. I will not allow that. I would love to see my home thrive and not die. Mahalo! And thank you for your time.

Scincerly,

Kalamakahi Crabbe

<u>SB-11</u>

Submitted on: 2/4/2019 11:36:40 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Andrea Quinn | Individual | Support | No |

Comments:

Dear Honorable Committee Members:

Please support SB11, which would prohibit the sale of polystyrene foam containers and the serving of food in said containers.

Because polystyrene food containers leach suspected carcinogens and neurotoxins such as styrene and benzene when coming into contact with warm food or drinks, as well as those foods and beverages containing alcohol, oils and acidic foods, polystyrene is toxic to humans, animal life and the environment. Studies show these toxins are slowly accumulating in the fatty tissues of humans and other animals.

Polystyrene is incredibly difficult to dispose of. It is bulky and recycling markets for polystyrene are small and shrinking. Studies estimate polystyrene takes up between 25-30% of landfill volume, which only adds to Hawaii's landfill woes.

Even when disposed of properly, polystyrene is often blown from disposal sites and into gutters and drains that lead to the ocean because of its lightweight and buoyant nature. Last year a whale died in Thailand after swallowing 17 pounds of plastic, and a dead sperm whale washed ashore in Spain with 64 pounds of plastic in its stomach. Birds, fish and sea turtles also commonly mistake polystyrene for food. Polystyrene is not biodegradable and only degrades into smaller and smaller pieces, thereby contaminating the lowest levels of the food web.

Additionally, since polystyrene is made with petroleum, the manufacture of it is a great contributor to the heat-trapping gases responsible for the greenhouse effect we are now seeing.

For these reasons, cities in the US and around the world are banning polystyrene. With all the economical and biodegradable paper or plant product alternatives, such as containers made from recycled compostable plant and wood fibers, there is no reason to continue the use of such an ecologically pernicious product.

Sincerely,

Thank you for your time and the opportunity to present my testimony.

Andrea Quinn

Kihei, Hawaii

<u>SB-11</u> Submitted on: 2/4/2019 12:23:16 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Leah Paulino | Individual | Support | No |

<u>SB-11</u> Submitted on: 2/4/2019 12:28:37 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Nanea Lo | Individual | Support | No |

Comments:

Hello,

My name is Nanea Lo and I'm a resident of Kaimukī, Oʻahu. I am writing in STRONG SUPPORT of this bill. I believe that this bill will help make Hawai'i a better, sustainable, and more responsible one in order to help protect our natural resources from pollution.

Thank you,

Nanea Lo

SB-11

Submitted on: 2/4/2019 1:40:37 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|----------------|--------------|-----------------------|-----------------------|---|
| Marissa Miller | Individual | Support | No | 1 |

Comments:

I am writing as a representative of the youth of Hawaii in support of SB11 to phase out polystyrene foam from food service establishments because it concerns the future of sustainability in my island home. As a surfer, I have seen the direct negative impacts of polystyrene foam containers on marine environments and wildlife, and we must transition away from this harmful material. Polystyrene breaks up into tiny pieces that are ingested by animals and which are nearly impossible to remove from marine environments once they are released. Thus, this is a problem we must address at the source rather than trying to mitigate its effects or cleanup the waste. Furthermore, polystyrene materials are harmful to human health too. It has been found that it leaches toxic chemicals not only into the foods that are put into containers when sold by restaurants but also into the fish that ingest polystyrene marine pollution (which we eventually eat), poisoning us. There are so many better alternatives to polystyrene that Hawaii's businesses must look to make the switch to, because we cannot afford to be polluting our environment, poisoning our wildlife, and poisoning our people. Speaking for myself and for my peers, I strongly urge you to pass this bill as a step in the right direction towards a healthier more sustainable future of Hawaii. Thank you.

<u>SB-11</u> Submitted on: 2/4/2019 2:18:47 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|---|
| Monika Haar | Individual | Support | No | 1 |

Comments:

The food business is one of the leading causes of plastic pollution. Please prohibit the use of polystyrene foam distrubuted by food businesses, so that we can limit the amount of pollution that is entering our environment and our food chain. Food related single use plastic is an urgent issue that causes many health problems to humans, as well as deaths to millions of animals on an annual basis.

<u>SB-11</u> Submitted on: 2/4/2019 2:26:17 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-------------------|--------------|-----------------------|-----------------------|
| Coleman Langstaff | Individual | Support | No |

Comments:

I am writing this in support of SB11. In previous testimonies I spoke of a new Hawai'i, where late lunches aren't stereotyped into harmful styrofoam polystyrene containers. I believe that this Hawai'i is achievable, and we are making progress in the right direction. Along with SB 522 and SB 367, Hawai'i can be the start of a revolution inside America, and continue to push humanity in the right direction of a more sustainable planet.

<u>SB-11</u> Submitted on: 2/4/2019 4:08:37 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| mainei kinimaka | Individual | Support | No |

Submitted on: 2/4/2019 5:05:47 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------------|--------------|-----------------------|-----------------------|
| Stefani Specker-Cook | Individual | Support | No |

Comments:

As a student and young citizen living in Honolulu I will be the one seeing the effects from humans that will be destroying our home and world.

Plastic is a material made to last forever, yet 33 percent of all plastic water bottles, bags and straws are used just once and thrown away. Plastic cannot biodegrade; it breaks down into smaller and smaller pieces. Even today sitting at Makapu'u beach on O'ahu, swimming amoungst the billions of pieces of plastic that wash up on one of the many beaches in Hawai'i. Our resources are so important to us that we should be doing everything we can to protect. There are thousands of landfills in the United States. Buried beneath each one of them, toxic chemicals from plastics drain out and seep into groundwater, flowing downstream into lakes and rivers. Even plankton, the tiniest creatures in our oceans, are eating microplastics and absorbing their hazardous chemicals. The tiny, broken down pieces of plastic are displacing the algae needed to sustain larger sea life who feed on them. Toxic chemicals leach out of plastic and are found in the blood and tissue of nearly all of us (humans). Exposure to them is linked to cancers, birth defects, impaired immunity, endocrine disruption and other ailments. Chemicals in plastic which give them their rigidity or flexibility (flame retardants, bisphenols, phthalates and other harmful chemicals) are oily poisons that repel water and stick to petroleum-based objects like plastic debris. So, the toxic chemicals that leach out of plastics can accumulate on other plastics. This is a serious concern with increasing amounts of plastic debris accumulating in the world's oceans.

As a tourist capitol of the world we need to set an example to all of the people entering and leaving Hawai'i. Everything suffers: tourism, recreation, business, the health of humans, animals, fish and birds—because of plastic pollution. The financial damage continuously being inflicted is inestimable.

<u>SB-11</u> Submitted on: 2/4/2019 5:41:38 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Alex Filardo | Individual | Support | No | |

Comments:

Plastic/stryrofoam not only accumulates in our landfills, pollutes our beaches, and destroys our marine life, but it also never truely breaks down and has the potential to kill hundreds of endemic species of Hawai'i. We do not need these containers on our islands. Many other cities banned the products and are doing just fine with takeout food. Its time to start thinking about our Aina.

Mahalo

<u>SB-11</u> Submitted on: 2/4/2019 6:09:27 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|----------------|--------------|-----------------------|-----------------------|--|
| Jordan Macklin | Individual | Support | No | |

Comments:

Please please, let's save our islands and get rid of this waste and prevent further damage to our islands and the life it gives to all.

Submitted on: 2/4/2019 6:42:16 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|--------------|-----------------------|-----------------------|
| Mackenzie Preble | Individual | Support | No |

Comments:

The use of polystyrene foam is wasteful and dangerous the environment. They are used once and then discarded, more often than not as litter. As litter, polystyrene foam can be ingested by marine and avian animals that mistake the foam as their food source. Not only does this diminish their appetite, thereby making them eat less and receive insificiant nutrients, the ingestion of polystyrene foam leaches chemicals that are known to be carcinogenic and immunodepressants. Our marine environment is in a constant battle with the impact of humans. Please consider taking this factor out of the battle and side with our natural environment by banning the use polystyrene foam.

<u>SB-11</u> Submitted on: 2/4/2019 6:49:34 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Brian Santiago | Individual | Oppose | No |

Comments:

<u>SB-11</u> Submitted on: 2/4/2019 7:05:06 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Jan Oda | Individual | Oppose | No |

Comments:

<u>SB-11</u> Submitted on: 2/4/2019 7:05:55 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| carissa cabrera | Individual | Support | No |

Comments:

Foamed polystyrene is endocrine disruptor, neurotoxin, and carcinogen. Please stop containnating our citizens when you are supposed to protect them. Take care of our 'aina. I am a marine scientist, and if you won't take care of our ecosystem nobody else will. The tipping point on our ecological timescale is coming to a head, and you have a choice to be on the right side of history. Please join the hundreds of cities that have already taken these measures.

<u>SB-11</u> Submitted on: 2/4/2019 7:21:26 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Richard Furst | Individual | Support | No |

Comments:

I'm writing to express my support for SB11 to ban "styrofoam" containers from Hawaii. As a surfer, hiker, hunter, and participant in numerous beach and stream cleanup efforts, I can personally attest to the amount of styrofoam debris that is littering our land and seas. Becuase it is so pervasive, it is one of the worst polluting substances ever created. We must take conclusive action now to keep more styrofoam from ending up in our natural environment. Thank you for taking positive action to help keep our environment clean.

<u>SB-11</u> Submitted on: 2/4/2019 8:31:36 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Laura Acasio | Individual | Support | No |

Comments:

<u>SB-11</u> Submitted on: 2/4/2019 8:47:04 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|--------------|-----------------------|-----------------------|
| Saturnino Doctor | Individual | Support | No |

Comments:

Let's replace these polystyrene containers with biodegradable paper products.. Good for the land and good for the future.

<u>SB-11</u> Submitted on: 2/5/2019 8:05:53 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|---------------|--------------|-----------------------|-----------------------|--|
| Katherine Lau | Individual | Support | No | |

Comments:

I strongly support SB11. There are many alternatives to polystyrene available now. Though there is a monetary cost for our hard-working local businesses to make the switch, we citizens know it is worth it because there is a monetary and ecological cost that will be paid if we delay phasing out poystyrene. ~Katherine Lau of Hilo

Dear Chair, Vice Chair and Members of the Committee,

I am in support of SB11 that prohibits the sale of polystyrene foam containers and serving of prepared foods using polystyrene foam containers statewide. I greatly appreciate the introducers of this bill being proactive in reducing the amount of non-biodegradable waster in Hawaii and the committee for hearing this bill.

Disposable food containers are a recent phenomenon and we have gone far longer without the use of polystyrene foam containers than we've had with them. This makes me believe that it is a simple act and small burden on businesses to prohibit their use in Hawaii. Many businesses have already taken proactive measures to use biodegradable containers, but those are few and we need the legislature to pass bills to get of this trash from our island home.

Polystyrene is just another type of plastic. In the U.S. alone, the number of polystyrene cups used each year would circle the globe 426 times; that's almost 18 million miles of Styrofoam cups!

Styrofoam is a big part of the plastic problem in our oceans. Being 95% air, its buoyancy allows it to float down waterways, eventually making it to the ocean where it gets broken down into smaller pieces and ingested by marine life.

Lightweight Styrofoam is easily carried away by wind and often ends up in places other than the landfill. Unfortunately, rogue Styrofoam ends up littering streets and beaches, clogging storm pipes, and harming animals. In order to protect wildlife, Antarctica has prohibited polystyrene.

I believe Hawaii can lead the nation and the world in banning the use of plastics. We are one of the few states that are able to see the impacts of plastic on marine life, our beaches, and human health on a daily basis. Please pass SB11.





Mahalo for your consideration Chelsea Arnott Kahaluu resident

<u>SB-11</u> Submitted on: 2/5/2019 8:57:03 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Andra Janieks | Individual | Support | No |

Comments:

Today, it is common knowledge that our waste, including polystyrene, is negatively affecting the ocean and our earth. In order to start working to solve this ever growing issue, we need to make changes TODAY. SB11 is a necessary step in the right direction.

<u>SB-11</u> Submitted on: 2/5/2019 10:35:41 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Heather George | Individual | Support | No |

Comments:

Aloha legislators, I strongly support this bill - it's time to follow Maui and Big Island Counties, and to lead at a statewide level...We need to and can do this, the change is coming locally so now let's be forward-thinking for all our islands!

Mahalo for your consideration,

Heather George, Koloa

Submitted on: 2/5/2019 11:15:33 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|------------------|--------------|-----------------------|-----------------------|--|
| Andrea Nandoskar | Individual | Support | No | |

Comments:

Aloha,

Please support SB11 banning polystyrene foam. I've lived in Waikiki for 18 years and work downtown and have seen tremendous amounts of trash generated from this material floating in our waterways as well as on the ground. It's harmful to marine life and humans, leaks carcinogenic chemicals when heated and is a danger to the health of our island's living ecosystems. There are alternatives that make sense and a minimal extra cost can be incorporated benignly into the buyer purchase price. My daughter and son-in-law own Moon & Turtle, a restaurant in Hilo, and struggle with the usual challenges small businesses face to thrive. They have made care of the aina an important part of their business model and encourage other businesses to do the same. Their customers appreciate this! Let's put Hawaii on the international radar as an island community and global tourist destination that cares.

Mahalo for your consideration.

<u>SB-11</u> Submitted on: 2/5/2019 11:31:34 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Sarah Afong | Individual | Support | No |

Comments:

We can do better. People will most often choose the cheapest option. If foam is not allowed, and plastics are not allowed, then people will have no choice to move to the next, most affordable option. We need to take care of our home.

<u>SB-11</u> Submitted on: 2/5/2019 11:47:27 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-----------------|--------------|-----------------------|-----------------------|--|
| Barbara Wiedner | Individual | Support | No | |

Comments:

Aloha Elective Officals,

Please vote yes on SB 11.

Mahalo Nui,

Barbara Wiedner

1774 Puu Kaa St

Kapaa Hi 96746

808-635-2593

Submitted on: 2/5/2019 12:40:52 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-------------------|--------------|-----------------------|-----------------------|--|
| Jennifer Milholen | Individual | Support | Yes | |

Comments:

Aloha, committee members. Thank you for taking SB11 up for a hearing. My name is Jennifer Milholen, and I work for KÅ• kua Hawai'i Foundation as the Waste Reduction Coordinator. Our programs work with schools and communities across the state who envision a plastic-pollution free Hawai'i. We achieve this through presentations, beach and watershed cleanups, community and business partnerships, and modeling waste free events, all engaging 10s of thousands of Hawa'i residents and visitors. The feedback from these programs is overwhelmingly unified: Get Foam Out! This is the "low hanging fruit" of senseless plastic pollution that can be quickly and effectively transitioned out.

The environmental and health detriments of foam for food vending are established and well-documented. We have known for years that, by design, EPS foam is ultra lightweight and escapes collection and management systems. Once in the environment, the foam fractures into billions of pieces of microplastics, which are consumed directly into the food chain - into us. Countless thousands of marine animals and birds starve to death because of ingesting plastics like foam. This is in addition to the leaching of known carcinogens from foam when used with hot and acidic foods.

In addition to the above, please consider these specific imperatives for supporting SB11:

1) Public Demand: The Honolulu Auditor office's 2018 report on prohibiting foam food containers determined that foam "bans" have overwhelming public and business support.

From the Report: "Restaurants want to do what is best for the environment. 95% of respondents said that they believe waste and litter is an environmental problem for our streams and ocean, and 98% of respondents stated that they would be willing to do more if they knew it would be green and protect the ocean. A majority (56%) of respondents stated that they would support (i.e., rating of 6-10 on a 10-point scale) a bill that banned the use of single-use polystyrene food containers.

In the 2018 Legislative Session, a foam ban bill (SB2498) was the most supported bill of the session, and recent memory, recieving well over 600 testimonies in support for a single hearing. Students were excused from classes, people took time off work, and

business owners left their restaurants all to come show support for measures like these. It was impossible to even get into the hearing room it was so full, so many of us congregated outside waiting for our chance to show support.

- 2) Economic Imperative: In 2017, the HI DOT Highways division produced a report on roadway flooding that indicated foam containers and plastic bags were the TOP items found to be clogging up storm drains, leading to flooding. The report also indicated that the prohibition of these items would save the division and the counties multiple millions of dollars in cleanup costs.
- 3) Established Precedent and Modeling: Maui and Hawai'i Island counties have already vetted these arguments and determined the value of prohibiting foam in food service. Maui's foam prohibition has already begun, and their environmental office will testify to the fact that it is well-supported and the transition has been smooth.
- 4) Environmental Imperative: "99% OF PLASTIC COMES FROM FOSSIL FUELS.

When we think about climate change, we typically focus on factories, coal and cars, but rarely on this fact. As plastic activists, we usually talk about downstream environmental impacts or health threats, but only marginally on the connection between the plastics economy and carbon pollution.

PLASTIC IS CONNECTED TO CLIMATE CHANGE AND IT POLLUTES AT EVERY STAGE: FROM MATERIALS EXTRACTION TO PRODUCT PRODUCTION TO WASTE DISPOSAL."

IF we want to truly act as the global environmental leaders that we claim to be, we HAVE to acknowledge that the flood of plastics in our lives are directly contributing to global climate change and take local, but impactful, changes to transition away from these single-use materials like EPS foam.

Mahalo for your time and consideration. Please support SB11.

Jennifer Milholen

Submitted on: 2/5/2019 12:46:47 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|---|
| Carla Gimpel | Individual | Support | No | 1 |

Comments:

Aloha, polyestirene is highly toxic and almost imposible to clear from the environment once was integrated to it, since it keeps desintegrating until is almost invisible for us. It flyes very quickly given it's lightness, which becomes particularly problematic in our windy islands. Please, we have so many more options to replace this material. Is time to change for good to environmentaly respectful materials, even eadibles are available in the market now. We can have island base products and expand our local economy! I love when i get served in Banana tree stems =) Plus is sooooo much garbage that we need to take care of. Taxes for those companies that wrap 25 tmes each product, no more bottled water or straws, please. We can be so much better. Mahalo, Carla

Submitted on: 2/5/2019 1:33:29 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Robin Bon | Individual | Support | No | |

Comments:

Aloha,

I am writing in support of SB11. I am a Kauai resident who has spent numerous hours picking up litter on our beaches and along Kuhio Hwy. Polystyrene products are one of the most frustrating things to pick up. Knowing that they will not biodegrade means they must be picked up. But they often crumble, are in small pieces, or blow about and require catching. Knowing that even when picked up, they will not biodegrade when put in a landfill or dumped at sea adds to my frustration. It is possible to eliminate these products and replace with environmentally friendly products. I support this bill that will help eliminate polystyrene products from our island.

Submitted on: 2/5/2019 1:38:37 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Hideki Kimukai | Individual | Support | No |

Comments:

Dear committee,

I am writing you this testimony to support phasing out Polystyrene food containers. Polystyrene starts to generate/leach out toxic chemical substances at 77F. Any contact with hot food, or just sitting in the car or room where tempreature exceeds 77F(very common) can have negative health effect to human and our fragile ecosystem. Beach sand and costal water samples taken from Oahu shows Styrene Oligomer contamination which are derived from Polystyrene products and contamination level will only go higher if we don't stop now. Cost of cleaning up/removal of such chemical substances from our water and land will be impossible but it is possible to stop its distribution and reduce the toxic contamination now. We had ignored our future too long. It is time to save our future and think about cost of what future has to pay.

<u>SB-11</u> Submitted on: 2/5/2019 2:31:44 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| laurel brier | Individual | Support | No |

Comments:

Ban styrofoam and Support SB 11

Thank you

<u>SB-11</u> Submitted on: 2/5/2019 3:01:27 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Cynthia Welti | Individual | Support | No |

Comments:

At some point or another we will end the use of Styrofoam. The sooner we do so, the faster the long recovery can start. Our children's children will be greatful for that time to start now.

<u>SB-11</u> Submitted on: 2/5/2019 3:22:33 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Megan Adolph | Individual | Support | No |

Comments:

I support banning the use of styrofoam in Hawaii because it is polluting our beaches and island. I volunteer with several beach cleanup organizations and have collected thousands of pieces of styrofoam. Not only does it affect us, but it affects the plants and animals life as well.

Submitted on: 2/5/2019 3:25:09 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Denise Boisvert | Individual | Support | No |

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| \mathbf{v} | 111 | | CI. | ILO. |

Dear Senators,

I support Bill 11 because a person doesn't need to be an environmentalist to know that this bill is good for this island's future.

Cities across the country and the world, and hundreds of thousands of food industry businesses in them, know that banning these dangerous products is the right thing to do for the health and safety of humans, wildlife, oceans, and the environment in the long-term.

My husband and I don't have children, but that does not stop us from caring about your children, your grandchildren, and all your future generations who have the right to inherit a healthy Hawai'i.

Thank you for your kind consideration to pass this bill.

Sincerely,

Denise Boisvert

Waikiki

Submitted on: 2/5/2019 3:33:50 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|---------------|--------------|-----------------------|-----------------------|---|
| Kim Jorgensen | Individual | Support | No | Ī |

Comments:

Dear Senators,

The dangers of styrofoam, polystyrene, and plastics to humans, wildlife, oceans, and the environment are substantially documented. Photographs of partially decomposed dead birds with pieces of these products laying where their alimentary tracts used to be is heartbreaking.

You cannot go to any park or beach, drive along any road, or hike along any stream or the Ala Wai canal, without seeing these products littered, floating, or blowing away.

This bill will not only help make Hawai'i cleaner and safer once it goes into effect, but it will make an enormous impact for all future generations. Please don't make our future generations ask why it took us so long.

Sincerely,

Kim Jorgensen

Waikiki

<u>SB-11</u> Submitted on: 2/5/2019 4:02:04 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| june chee | Individual | Support | No |

Comments:

Testimony

February 6, 2019 (1:45 p.m.) Conference Room 224

By: Tanya Torres

SB 11 - RELATING TO POLYSTYRENE FOAM CONTAINERS.

Senators and members of the committees:

I strongly support SB 11 because it will phase out polystyrene foam in the food service industry. We need to get rid of styrofoam containers because they are harmful to people and to our environment. They add unwanted toxins to your food and drinks, which you then unknowingly and never asking for it, ingest. They are made from synthetic chemicals that leach when they come into contact with hot, greasy, or acidic food. Then if not disposed of correctly, these single use plastics more often that not make their way into our waterways and out to our beaches and oceans. Sea life such as Hawaiian green sea turtles often mistake this stuff for food and ingest it which can kill them. It cannot be digested and and usually is contaminated full of poisons that it has absorbed from contaminants while floating in the water. If the foam makes its way to a trash can and not the beaches, these unwanted chemicals are then released into the air as a form of toxic ash or smoke when burned at Hpower. So that is not a great solution. Polystyrene also cannot be recycled. This material has far more negative impacts associated with it than positives. Hawaii needs legislative action to promote the better alternatives that are readily available. I hope to see Hawaii move in the right direction to protect its land, resources, and people. Thank you for the opportunity to testify in support of this important measure.

Submitted on: 2/5/2019 5:50:18 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Ruta Jordans | Individual | Support | No | |

Comments:

Testimony in favor of SB11

Before moving to Hawaii I spent eight years helping to clean beaches in Easternmost Maine. I thought the amount of plastic we picked up was horrendous, especially takeout containers and cups of polystyrene, brand name styrofoam. What we learned in the little town in Maine after one year of a voluntary styrofoam ban by 90% of our restaurants, was that when we stopped using styrofoam there was less on the beach. The only way to be sure there will be no more polystyrene in our ocean is for us to stop using it.

Why am I so opposed to polystyrene and in favor of this bill? Plastic, including polystyrene, is one of the most durable things made by man (ergo we turn it into single-use disposables). Polystyrene never decomposes into another material, in the way that our food waste decomposes into compost. Polystyrene just keeps getting smaller and smaller until it is nano sized balls of polystyrene. According to a Foundation for Achievements in Science and Education fact sheet, long term exposure to small quantities of styrene, from which polystyrene is made, can cause neurotoxic (fatigue, nervousness, difficulty sleeping), hematological (low platelet and hemoglobin values), cytogenetic (chromosomal and lymphatic abnormalities), and carcinogenic effects. Polystyrene cups and takeout containers tend to leach into hot and acidic food and beverages, such as tea, coffee, and tomato based meals. We've been told it is a minuscule amount. How much do you want to be eating? A 1988 survey published by the Foundation for Advancements in Science and Education found styrene in human fatty tissue with a frequency of 100% at levels from 8 to 350 nanograms/gram (ng/g).

As a volunteer with Surfrider I've been going to restaurants throughout Kauai to tell them about the Ocean Friendly Restaurant program, which is Surfrider's effort to keep plastic, especially polystyrene, out of the ocean. The majority of restaurant owners and managers immediately identify with my message, that we have to keep polystyrene out of the ocean, and then they brag about how their restaurants are styrofoam free and give me a big mahalo hug! Unfortunately, there are still some who do not know the dangers. One restaurant owner proudly told me that she will stop using it when the government bans it. So there you are. Now it is your turn.

<u>SB-11</u> Submitted on: 2/5/2019 7:35:04 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| kenneth choi | Individual | Support | No |

Comments:

I suggest that the committee will support SB 11 for the benefits of our health, environment, and people.

With the ongoing plague of plastic going into our oceans, Hawaii can be the forefront of the fight against plastic pollution. Polystyrene has been found that it may cause cancer, hearing loss, and other various nervous system effects if polystyrene was heated (including holding hot foods and liquids - the primary source of polystyrene leaching). With these risks, I believe that it is a no-brainer for SB 11 to phase out polystyrene foam containers.

<u>SB-11</u> Submitted on: 2/5/2019 8:14:02 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Esti Grinpas | Individual | Support | No | |

Comments:

<u>SB-11</u> Submitted on: 2/5/2019 8:20:11 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| robert brower | Individual | Support | No |

Comments:

strongly support. Mahalo

<u>SB-11</u> Submitted on: 2/5/2019 8:31:32 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Mary Lacques | Individual | Support | No |

Comments:

<u>SB-11</u> Submitted on: 2/5/2019 8:45:10 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Kapua Kawelo | Individual | Support | No |

Comments:

The continued use and disposal of polystyrene foam in our island state is a palling. There is absolutely no reason why people cannot adjust their habits to reduce waste on an island with limited land area and overflowing landfills. This pill will lead to a healthier environment and will allow Hawaii to lead the way for the rest of the nation and responsible stewardship of our resources. Please pass this bill! Mahalo, Kapua Kawelo

<u>SB-11</u> Submitted on: 2/5/2019 8:59:25 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------------|--------------|-----------------------|-----------------------|--|
| Kanehoalani Kawelo | Individual | Support | No | |

Comments:

Too much waste already! Fix um! Please pass this bill.

<u>SB-11</u> Submitted on: 2/5/2019 9:08:18 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Georgia Acevedo | Individual | Support | No |

Comments:

I strongly support SB 11 to ban polystyrene foam containers which litter our island home. Instead of leading the world in banning this plastic menace, we have fallen far behind. Other states and countries have joined the fight. The entire country of COSTA RICA has banned plastic by 2021! We can do this! Save our birds and marine life!

<u>SB-11</u> Submitted on: 2/5/2019 9:15:20 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Joby Rohrer | Individual | Support | No | |

Comments:

Dear Elected Officials,

Foam is a convenience that we can no longer accept due to its environmental impacts. Please pass this bill.

Aloha,

Joby Rohrer

<u>SB-11</u>

Submitted on: 2/5/2019 9:22:39 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Ho'ohila Kawelo | Individual | Support | No |

Comments:

Aloha to whoever it may concern,

I am writing to you today to speak of my concern about the effect of foam containers on the environment in Hawaii and throughout the world. When it comes to the environment foam has no beneficial effects whatsoever, due to the fact that it takes millions of years to decompose. In the time that it is decomposing foam has the time to travel all over the world and affect more than one creature. Once put into a landfill it is only to easy for foam, especially the minuscule pieces, to escape into a more delicate territory, like the ocean or forest. There the foam most likely will be consumed by an unsuspecting and relatively unintelligent animal, poisoning their bodies and often leading to death by digestive malfunction.

It is only too simple for us to lower our negative impact on the environment so why are we delaying action. Is it so crucial that we use nonbiodegradable materials to store and receive our food? Are we so selfish that we can't spend an extra ten dollars to buy a reusable container? Personally, my family is not so self-centered and thinks of how we can make a difference every day. We spend that extra money and keep spare containers in the car for any occasion because we want the animals to live without the interference of our developing world. If we don't act now then one-day species population's will diminish to critical sizes and you can look back and finally feel guilty enough to think, why didn't I do something? You can call me dramatic and say what you do won't make a difference, and yes, it's true, if everyone says that then nothing will be accomplished.

But, this bill will begin the fight to a better future in the positive effect of humans on the environment. So please pass it as I, and hopefully, others stand in support of a FOAM FREE Hawaii.

Mahalo for listening,

Ho'ohila Kawelo

Highschool Student

<u>SB-11</u> Submitted on: 2/5/2019 9:30:08 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Susan Oppie | Individual | Support | No |

Comments:

<u>SB-11</u>

Submitted on: 2/5/2019 9:34:51 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Zamora Sanchez | Individual | Support | No |

Comments:

My name is Zamora and I have visited the islands many times, I fell in love and now I am making the steps to move there. I have always been an ocean lover, and being so I care so much for this amazing body of water full of so much life! The ocean helps the earth digest all the pollution we create which could definitely not be done by just the earth itself, as we can see there is still a lot that we create that can't be caught up on. The islands are home to beautiful people, and they take care of us all. The islands deserve to be cared for and so do our oceans. Plastic is a big problem that needs to be addressed ASAP. The plastic breaks down into smaller particles that go into the currents of the ocean, into the food we eat, and takes the lives of our ocean friends. There are a lot of biodegradable and reusable options for single use items if they are needed, so banning them will not hurt anyone. We need to keep this amazing environment clean, and help other parts of the ocean where trash from the islands is traveling to in the ocean currents. This will help everyone as a whole, including the earth that takes care of us so well. Please see the damage we cause as it is not including unnecessary single use items, the least we can do to start the process of cleaning and healing this earth is to ban them. Think of the world children are being brought into and how they see that some of us treat the earth poorly, and that is what they grow up thinking is right. Let's create a good world for them and be good examples so they can do the same and start the small steps to healing our beautiful home!

<u>SB-11</u> Submitted on: 2/5/2019 9:40:25 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|---------------|--------------|-----------------------|-----------------------|---|
| Sara Van Gent | Individual | Support | No | Ī |

Comments:

I support this measure. Please pass it and eliminate polystyrene containers from restaurants and served food. Polystyrene leaches toxins into the food and can make us sick. It is an outdated product and should not be used on our island.

<u>SB-11</u> Submitted on: 2/5/2019 9:49:55 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Hannah | Individual | Support | No |

Comments:

<u>SB-11</u>

Submitted on: 2/5/2019 9:50:42 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-------------------|--------------|-----------------------|-----------------------|
| Christina Comfort | Individual | Support | No |

Comments:

I strongly support this bill to ban polystyrene food containers for takeout. Polystyrene is persistent and harmful in the environment, as it never biodegrades, and additionally has been shown to release harmful chemicals into food when heated. It is not safe for our earth or our bodies, and it is time to move past this substance towards more sustainable options, like more dine-in eating, BYO tupperware and silverware, or cardboard, biodegradable takeout containers when necessary.

Just a few weeks ago I went to relax on a beach near Nanakuli. Instead of relaxing and enjoying the beauty of Oahu, I ended up spending the entire time cleaning up trash from the beach, much of which was polystyrene containers that had been presumably put into a trash can but blown out and onto the beach by the prevailing offshore winds. Not all the plastic on our beaches comes from Hawaii, but polystyrene does, and it's something that is in our power to change for the better! I've seen many restaurants and food trucks adopt more sustainable options and they have been successful.

Thanks for considering this testimony in support of SB11.

Mahalo,

Christina Comfort, Pupukea, HI

<u>SB-11</u> Submitted on: 2/5/2019 10:12:45 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Monrudee Osa | Individual | Support | No |

Comments:

EDUCATE YES VERY IMPORTANT GET PEOPLE TO UNDERSTAND THEN THEY WILL DO THE RIGHT THING. DO WE ALL WANT TO SAY HAWAII IS THE FIRST STATE 100% RECYCLE AND FREE OF PLASTIC? IT'S NOT A DREAM IT'S POSSIBLE BUT WE HAVE TO DO IT TOGETHER. 1.428 MILLION (2017) THAT LIVE HERE IN HAWAII CAN DO IT TOGETHER. NOT EASY BUT JUST TRY BETTER THAN DOING NOTHING AT ALL.

<u>SB-11</u> Submitted on: 2/5/2019 10:18:19 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|---|
| Nadine Lane | Individual | Support | No | 1 |

Comments:

Plastic AND polystyrene is absolutely horrible for the ocean, animals and even ourselves. We live on an island where plastic and polystyrene are more likely to reach the sea, allowing animals to digest it, even fish! And who eats fish? We do! Please support this bill!

Mahalo

<u>SB-11</u> Submitted on: 2/5/2019 10:22:49 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Alexandra | Individual | Support | No | |

Comments:

Stop the polystyrene. It is not necessary and there are so many other available rescources that are more eco-friendly.

<u>SB-11</u> Submitted on: 2/5/2019 10:28:24 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|--------------|-----------------------|-----------------------|
| Matthew Tactacan | Individual | Support | No |

Comments:

I reminisce of the days of my childhood, where I could swim in the clear water and not worry about the infinite itchy things flowing across my body. Today, no matter what beach you go upon this island, it's not difficult to find some type of styrofoam-material neglected or buried throughout the ground, even before I could feel the once pristine "ke kai ka wai" on the soles of my feet.

<u>SB-11</u> Submitted on: 2/5/2019 11:20:42 PM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Dwamato | Individual | Support | No |

Comments:

SB 11

In Strong Support

Hawaii, and all other 49 states do not need plastic and foam, or single use packaging for food or other items. As a Hawaii resident, PhD marine ecologist, and citizen that regularly enjoys our coastlines, it is clear that Hawaii-derived rubbish is ending up in our marine environment. It is also apparent to me that the chemical companies and their lobbyists make up the majority of the opposition to this and similar legislation. Please vote with the will of the residents of this beautiful state to keep our beaches and environments clear of trash. Mahalo nui -Daniel Amato

<u>SB-11</u> Submitted on: 2/6/2019 12:28:41 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-----------------|--------------|-----------------------|-----------------------|---|
| Joanna Wheelers | Individual | Support | No | 1 |

Comments:

I strongly support this bill to help keep our island and our Earth clean from a poison that is an environmental nightmare. Please do pass this progressive measure to help protect Hawaii.

I am a mother and want to know my kid and her kids will be able to enjoy a beautiful World that is not drowning in garbage and that the marine life will be able to thrive.

Please pass this bill.

With warmest aloha,

Joanna Wheeler

Registered Voter

Kapaa, Hi

<u>SB-11</u> Submitted on: 2/6/2019 12:36:40 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-------------------|--------------|-----------------------|-----------------------|--|
| Lindsay Terkelsen | Individual | Support | No | |

Comments:

This seems so obvious. Polystyrene form is dangerous to us, animals, and the environment.

<u>SB-11</u> Submitted on: 2/6/2019 3:16:46 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Simon Russell | Individual | Support | Yes |

Comments:

<u>SB-11</u>

Submitted on: 2/6/2019 7:51:19 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|--------------|--------------|-----------------------|-----------------------|
| Karen Abe | Individual | Support | No |

Comments:

My name is Karen Abe and I am writing as a representative of youth voices as a resident of the Kahala Area. I am writing in full support of SB 11, Polystyrene Foam ban to reduce foam on the consumer system in the Hawaii Islands. Thank you for considering this important bill.

Foam has both negative health impacts as chemicals are leached into hot foods when it is served in a styrofoam container and negative environmental impacts as foam is 90% air the light body makes the container prone to becoming trash that ends up in the streets and eventually the ocean. Removing foam from our consumer system will allow Hawaii residents reduce/alleviate their carbon footprint, health issues and animal cruelty that is indirectly caused by our choice in plastic container usage.

There are positives in building a foam-free community. Firstly, the switch from using styrofoam containers to other alternatives WILL NOT cause a negative financial impact on businesses. This has been clearly proven by the 140+ of foam free restaurants enrolled in the the Ocean Friendly Restaurants Hawaii program. Secondly, the switch from paper or biodegradable alternatives give a nicer "aesthetic appeal"; hence will market better to teens and tourist who are indulged in taking photos of the island deli. Thirdly, I am currently studying abroad in London where single-use plastics such as styrofoam are banned and have felt no difference in convenience without styrofoam (in fact, I feel better without it!)

Hawaii, as a unique state surrounded by the marine life all around, we are one of the few state that has a bold connection and understanding of the environment in the United States. I believe it is our duty to lead our nation by example and implementing this foam ban as a way to illustrate the "Malama Aina" culture. The passing of this bill will also connect to the preservation of this unique Hawaiian culture.

| Thank you for your consideration of my testimony and of this important issue. |
|---|
| |
| |
| mahalo, |
| Karen Abe |

<u>SB-11</u> Submitted on: 2/6/2019 7:56:20 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Joshua Thomas | Individual | Support | No |

Comments:

I strongly support this bill!! Please do the right thing!!

<u>SB-11</u> Submitted on: 2/6/2019 8:52:18 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Sara Matsumura | Individual | Support | No |

Comments:

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Taking control of persistent solid waste pollution

James M. Coe^{a,*}, George "Bud" Antonelis^b, Kirsten Moy^c

- ^a NOAA Fisheries, Ret., 11207 83rd Pl. NE, Kirkland, WA 98034, United States of America
- ^b Nā Kama Kai, P. O. Box 1803, Waianae, HI 96792, United States of America
- ^c Hawai'i Coral Reef Initiative, Social Science Research Institute, University of Hawai'i at Mānoa, 2424 Maile Way, Honolulu, HI 96822, United States of America



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Marine litter
Plastic pollution
Waste management

ABSTRACT

The complexity and scale of the sources, types and environmental impacts of persistent solid waste pollution (PSWP) continue to overwhelm the capabilities of government and private efforts to control it. Global cumulative production of virgin plastics is expected to quadruple by 2050 with a concomitant doubling of plastic waste. All nations must take significant steps to realize eventual mitigation of PSWP. These will include adopting a long-term PSWP elimination policy, creating an overarching authority to lead and coordinate a comprehensive national solid waste management program, and creating an International Convention for the Prevention of PSWP to enable global solutions for this global pollution. Initiating these changes will necessitate major, coordinated efforts on the part of environmental organizations, their supporting foundations and concerned citizens.

1. Introduction

While it is difficult to characterize the rise of the petrochemical revolution in a few sentences, the salient features of this industrial-economic phenomenon certainly include cycles of innovation, acceptance and widespread realization of the associated benefits followed by eventual recognition of the environmental consequences with efforts to mitigate them. Examples of these impacts include smog, ozone depletion, climate change, acid rain, ocean acidification, toxic substance pollution, and persistent solid waste pollution (PSWP), to name a few (McLusky, 1982; Mehlman, 2006; Schreck, 1998; Yin et al., 2017). The overall effectiveness of responses to these pollutants depends on the timing of the identification of the types, sources and the assessments of their impacts. The more complex and varied the polluting materials, their sources and types of environmental threats and the longer the period over which they are identified, the more piecemeal and less efficient the collective mitigation response is likely to be.

This pattern may be obvious, but it seems to be at the heart of the on-going marine debris issue, 90% of which is plastics (Kaza et al., 2018). The proportion of persistent solid waste in the waste stream varies globally based on economy, consumption patterns and product availability. Further, the amount of PSWP generated from any waste stream depends significantly on the effectiveness of local waste management processes (Jambeck et al., 2015; Zhang et al., 2010). Plastics specifically constitute over 12% of all municipal solid waste (Kaza et al., 2018) and 'leakage' occurs at all phases of the production-

disposal life cycle due to inadequate management (Kershaw, 2016). PSWP includes a staggering number of types and formulations of plastic products with varying characteristics as pollutants (Derraik, 2002; Jepson et al., 2016; Murphy et al., 2015; Vasseur and Cossu-Leguille, 2006). Add to this the range of sizes and shapes of individual pollutant particles from meters to nanometers (they are constantly fragmenting at varying rates; Cole et al., 2011), and one begins to appreciate the complexity inherent in measuring the problem and conceiving strategies for its mitigation.

In general, global solid waste is composed of persistent (plastics, glass, metal, other) and naturally degradable components (food and green, wood, paper and cardboard, rubber/leather, other). While any of these components may be classified as pollutants depending on circumstances, the persistent materials require specific collection and processing to prevent their becoming long-term pollutants. Among the persistent wastes, glass and metals are relatively inert and have, or can have, high rates of recycling because of their value as feedstock, their general purity, and ease of identification and separation in the waste stream. Plastics and other materials make up 26% of global solid waste, an estimated ratio of 12% plastics and 14% other (Kaza et al., 2018). The proportion of that "other" category that is a persistent material like plastic is, as of now, unknown and a topic for future study. While virtually all the following treatise is based on plastics data, we have chosen the term persistent solid waste pollution (PSWP) as our subject in recognition of this potentially significant "other" category of persistent solid wastes. This choice emphasizes the necessary recognition

E-mail address: jim.coe@comcast.net (J.M. Coe).

^{*} Corresponding author.

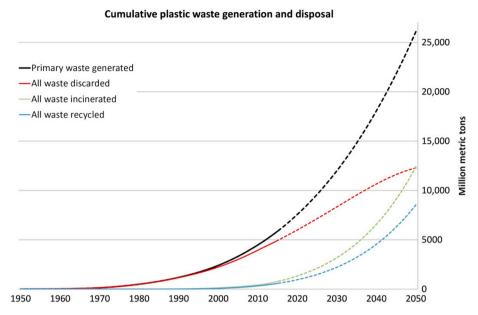


Fig. 1. Cumulative plastic waste generation and disposal (in million metric tons).

Solid lines show historical data from 1950 to 2015; dashed lines show projections of historical trends to 2050. From Geyer et al. (2017). Production, use, and fate of all plastics ever made. Science Advances 3, e1700782. https://doi.org/10.1126/sciadv.1700782. Reprinted with permission from AAAS.

that mitigating the deleterious impacts of marine debris (marine litter) is, in fact, a global solid waste management challenge.

2. The status quo

PSWP is now recognized to be ubiquitous in all terrestrial and aquatic ecosystems and in the atmosphere (Derraik, 2002; Dris et al., 2016). A recent assessment of global plastics production and waste management practices concludes that, as of 2015, the world has produced a total of 8300 million metric tons (Mt) of virgin plastics, out of which 6300 Mt. is plastic waste (13.86 trillion lbs.; Geyer et al., 2017). The study predicts that if present production growth rates continue, cumulative production of virgin plastics is expected to rise to 34,000 Mt. by 2050, 12,000 Mt. of which will end up in landfills or extant in the environment (Fig. 1; 2017).

The fate of persistent solid waste depends on the existence and effectiveness of waste management systems on the local level. Jambeck et al. (2015) estimated that in 2010 alone 275 Mt. of plastic waste was generated in 192 coastal countries (representing approximately 93% of the global population) of which 99.5 Mt. was generated within 50 km of the coast. Using information on the types of waste management systems in use in each of the coastal regions, the authors classified 31.9 Mt. as mismanaged, of which between 4.8 and 12.7 Mt. of plastic waste entered the ocean in that year. Presumably, the residual 19.2 to 27.1 Mt. of mismanaged plastic waste remained on land as potential future ocean pollution. Assuming no improvements in current waste management infrastructure, the cumulative amount of mismanaged plastic waste (available to reach the ocean from land) is estimated to grow by an order of magnitude by 2025 (Fig. 2) (Jambeck et al., 2015). While these estimates do not include maritime sources or input resulting from natural disasters (floods, tsunamis, etc.), Kefela et al., 2018 estimate tsunamis to contribute up to 2.4 Mt. and textile fibers add another 0.4 Mt. to the annual flow of PSWP into the oceans. There have been no recent estimates of total maritime sources of PSWP.

By another estimation, approximately 60% of all plastics ever produced were discarded and are accumulating in landfills or in the natural environment (Geyer et al., 2017). Sequestration of persistent waste in landfills is only a temporary measure for the prevention of pollution. Landfilling may delay the release into the environment for periods of weeks to millennia, depending on the product and the design of the landfill, but it is by no means an endpoint disposal option. Perhaps mankind will be mining these landfills for valuable resources in some distant future. Recycling may delay some future primary plastics

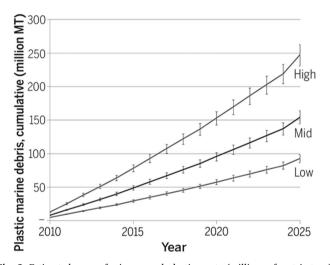


Fig. 2. Estimated mass of mismanaged plastic waste (millions of metric tons) input to the ocean by populations living within $50\,\mathrm{km}$ of a coast in 192 countries, plotted as a cumulative sum from 2010 to 2025.

Estimates reflect assumed conversion rates of mismanaged plastic waste to marine debris (high, 40%; mid, 25%; low, 15%). Error bars were generated using mean and standard error from the predictive models for mismanaged waste fraction and percent plastic in the waste stream. From Jambeck et al. (2015). Plastic waste inputs from land into the ocean. Science 347, 768–771. https://doi.org/10.1126/science.1260352. Reprinted with permission from AAAS.

production but this effect is extremely difficult to verify (Geyer et al., 2015). Done properly, incineration or other thermal destruction methods including waste-to-energy programs are potential endpoint disposal strategies for most plastics. The potential large-scale use of thermal destruction, however, will require development and incorporation of significant emission control technology to avoid environmental and public health impacts. Open burning is a common method for reducing trash heaps, but it is a dangerous, potentially toxic and incomplete disposal method (U.S. Environmental Protection Agency, 2016). To date, biodegradable or other enhanced fragmentation formulations for single-use materials may reduce litter and potential rates of physical interactions with megafauna, for example, but are not endpoint solutions as they merely accelerate the dispersion of the polymer materials into the environment as micro- and nano-plastic

bits. Ultimately, the long-term sustainable solution to PSWP will result from global movement toward an economy in which persistent solid waste pollutants are designed out of the production and use cycle (Kershaw, 2016; ISWA, 2017).

One must contemplate the fate of plastics that are not or cannot be recovered from the environment. We know that PSWP is created and distributed world-wide. Some proportion of macro-, or mega-plastics are recovered through waste stream collection systems and by clean-up programs, most to be sequestered in landfills of varying quality. Once plastic waste materials are fragmented into particles less than a 5 mm in diameter, the likelihood of their being removed from the environment becomes vanishingly small (da Costa, 2018; Gallo et al., 2018). While rates of degradation and fragmentation vary based generally on polymer type, additives, and exposure, the process is inexorable (Andrady, 2011). Scientific attention to this micro-plastic phenomenon is accelerating and some mechanisms for biological impacts have been described (Rocha-Santos, 2018; Gallo et al., 2018). The standards and techniques for quantification of micro- and nano-plastics in the environment require further development (Ogonowski et al., 2018) before the extent and character of their potential ecosystem impacts can be realistically evaluated. However, the physics of this degradation suggest that the chemical additives employed in polymer formulations are eventually released into the environment, including colorants, plasticizers and other known toxic materials (Gallo et al., 2018; Murphy et al., 2015; Ng, 2017).

After nearly 40 years we know a great deal about PSWP but struggle to implement mitigating and preventive solutions. While a welter of projects and plans exist to tackle various sources or types of concentrations of PSWP, the obvious fact is that no large-scale progress has been or is being made against the rising tide of marine (and terrestrial) debris. It appears that some combination of vastly improved waste collection, sequestration and destruction technologies will be required to change the course of PSWP growth. Reduction in the demand for virgin plastic production through increasing recycling rates, reusing and creating reusable alternates for disposable materials, adopting minimal packaging strategies, eliminating incentives to discard, and many other innovations in chemical and materials engineering must be pursued (United Nations Environment Programme, 2016; Kershaw, 2016). None of this is new, it just hasn't come to fruition at a scale that will reduce the growing pollution of the entire planet. The concepts are simple and have been voiced for decades, however, under current efforts best estimates suggest cumulative plastic waste will double by 2050 (Geyer et al., 2017) and the amount available to become ocean pollution will grow by an order of magnitude by 2025 (Jambeck et al., 2015). The organizations, resources, leadership and commitment to tackle this problem, with all due respect to the millions of people concerned and involved, are inadequate.

Judging from the rising frequency of relevant keywords in the scientific literature (Google, 2018), the trend in topics presented at International Marine Debris Conferences in 2011 and 2018, and in the growing national participation in the United Nations Environment Programme (UNEP) Clean Seas Program (UNEP, 2017) among others, the time appears ripe for taking control of persistent solid waste pollution. A recent systematic review of the literature on the impacts of plastics in the ocean concluded that irreversible harm may be unavoidable should governments fail to begin mitigating plastic debris (Rochman et al., 2016). The way forward depends on the concerted actions of national governments with the concomitant leadership and support of civil society.

3. A national PSWP policy

Because the oceans are a global system, PSWP in the oceans is a global problem. The primary sources of PSWP in the oceans are land-based, and all power and most resources to enact, sustain and enforce solutions to national and international pollution problems are held by

national governments. Therefore, the first step toward marshalling forces for solving the PSWP problem begins with national governments. Despite widespread commitment in many international fora, such as UNEP, the G-7, UNSDG-14, etc., governments around the world have not yet implemented the steps necessary to reverse the growth of PSWP. The steps taken, while laudable and necessary, are typically nonbinding and involve single product bans (bags, straws, utensils, microbeads, etc.) aimed primarily at litter control and recycling rates. Absent the full commitment by national governments to research, funding, implementation and enforcement, these steps will not materially change the plastic pollution trajectory. In this paper we propose three major actions for PSWP mitigation using the United States government example to illustrate the problems and types of changes that are necessary to meet the PSWP challenge. With some imagination, the steps described here are likely to be generally adaptable for most other governments.

Persistent solid waste is a major ocean, terrestrial and atmospheric pollutant (fibers) that is rapidly increasing without signs of slowing. The enormity of the PSWP problem will not be adequately addressed in the short-term no matter what actions governments choose to take. Massive amounts are already extant in the environment, inputs are global in scale and effective waste management system capacity is limited, particularly in low income countries, despite the fact that 187 out of 217 (86%) countries and economies reported they had laws or guidelines regarding solid waste management (Kaza et al., 2018). The escalation of this pollution to unimaginable levels and impacts is inevitable without the adoption of a long-term commitment to comprehensive efforts to control it. This begins with national governments adopting and communicating a permanent policy to eliminate PSWP. This does not presume there will be no persistent solid waste. It presumes that a drastic reduction in persistent solid waste pollution over time is in the best interests of all nations and the world. The IUCN listed an improved governance framework as critical to addressing marine plastic pollution (Kershaw, 2016). Adoption of such a national policy tells civil society, the legislature, the courts, agencies and industries and other nations that the most effective way to rise above the status quo must involve a significant level of government leadership and intervention. This in turn enables commitment, stimulates ideas, fosters innovation and elevates attention to potential solutions strategies, all of which lead toward more effective implementation.

Very recently, some nations recognized this need; they articulated broad policy pledges addressing systematic attention to plastic pollution. The UK, is applying the concept of a circular economy (Pearce and Turner, 1991) to plastic waste elimination (Neufeld et al., 2016). Indonesia's Plan of Action on Marine Plastic Debris (The Government of the Republic of Indonesia, 2017) is credible model for PSWP mitigation policy. At an international scale, five of the seven members of the G-7 endorsed the Charlevoix Blueprint for Health Oceans, Seas and Resilient Coastal Communities, including the Ocean Plastics Charter Annex to incorporate "a lifecycle approach to plastics stewardship on land and at sea." While these international pledges remain nonbinding, they are essential steps toward national policy commitments for effective action on PSWP.

4. Reorganizing to meet the PSWP challenge

The revelation of, and governments' responses to plastic pollution began in the 1970's and '80s and have continued to evolve over the decades. For example, by 2005 a review of US laws relating to elements of the marine debris problem revealed no less than twenty-one statutes involving seven Federal Departments and at least eleven agencies within them (National Oceanic and Atmospheric Administration, 2008). Also, US commitments in eight international agreements involve at least five Federal Departments (NOAA Marine Debris Program, 2005). Departments, and their respective agencies are in competition with each other for limited resources as well as for executive and

legislative attention and public approval. The dynamics of this competition across these agencies and various responsibilities under the marine debris laws and agreements guarantees a severe compartmentalization (turf) of activities responding to the PSWP challenge. The principal point is that none of the charged agencies has, or will likely ever have sufficient authority, resources or expertise to lead or direct a coherent national effort to mitigate PSWP. Absent this leadership, the current piecemeal, bottom-up approaches are doomed to collective inadequacy. This problem was clearly identified by the US National Research Council's Committee on Shipborne Wastes during its assessment of the US implementation of Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) (International Maritime Organization, 1983) in 1995 (National Research Council, 1995). The NRC Committee's recommendations for the consolidation of leadership to guide the full implementation of MARPOL Annex V were never enacted.

The remedy for this dilemma which may be common among national governments, incorporates the creation of an overarching authority (a permanent national commission or new agency/ministry) to either direct the existing agencies activities with respect to PSWP policy, programs and law or to extract those elements from the agencies and assemble them as a new, independent entity within the national government. Some form of hybridization of these might be workable if based on reasonably independent elements of the overall challenge (e.g., maritime vs. land-based, impacts research vs. waste management R&D, enforcement, etc.). A national policy commitment to the eventual elimination of PSWP coupled with broad public mandate for legislation to create the lead Commission or agency will be necessary to make this happen. A related US example might be the US Marine Mammal Protection Act of 1972 and its creation of the Marine Mammal Commission to oversee and advise multiple US agencies with marine mammal related authority.

Mandates for the new authority should include the development and direction of coordinated strategies to address the technological, economic, legal and bureaucratic features of the PSWP challenge. This effort should begin with the commissioning of a program of studies by competent national (e.g., the US National Research Council) and/or international (e.g., UNEP, ISWA) technical bodies to provide carefully considered strategic guidance for the effective prioritization and accomplishment of the Commission/Agency's objectives.

Broadly, these strategies and the implicated US agencies should include:

- The analysis and consolidation of existing laws, regulations and policies to establish a coherent, coordinated legal foundation and regulatory authority for actions required to address PSWP (Department of Justice (DOJ), Office of Management and Budget (OMB)).
- 2. The development of the capacity to conceive, set priorities for, fund and coordinate chemical engineering and waste management technology research to develop non-polluting (or less polluting) materials and disposal alternatives (Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA), Department of the Interior (DOI), Department of Energy (DOE), Department of Agriculture (DOA)).
- The development, coordination and funding of public awareness and education programs to foster voluntary acceptance of behaviors supporting PSWP reduction (Department of Education (ED), EPA, NOAA, DOI).
- The research, design and implementation of appropriate incentive systems to foster behavior and business decisions favoring PSWP reduction (Department of Commerce (DOC), Internal Revenue Service (IRS)).
- The evaluation, implementation and funding of long-term, internationally applicable indices for monitoring changes in key types and sources of PSWP (NOAA, EPA, DOI).

- 6. The creation and funding of suitable government, industry, university, and NGO grants programs and partnerships to augment the work of the Commission/Agency (OMB, DOJ, IRS).
- The development and funding of adequate enforcement capacity for both land-based, sea-based and fiscal regulatory regimes as they evolve under national and international programs (US Coast Guard (USCG), US Navy (USN), DOJ, EPA, Department of Defense (DOD)).

Ideally, the entity(s) created to carry out these mandates for mitigating PSWP, whatever form it may take, should be permanently chartered and funded as full success is surely many decades in the future.

5. A global framework is essential

Part XII, Section 5, article 207 of the United Nations Convention on the Law of the Sea (United Nations, 1983) delineates States' obligations to prevent, reduce and control pollution of the marine environment from land-based sources. States shall adopt laws and regulations and other measures as necessary for these purposes "taking into account internationally agreed rules, standards and recommended practices and procedures." This Article explicitly recognizes the importance of "taking into account the characteristics of regional features, the economic capacity of developing states and their need for economic development."

While Article 207 was written prior to the recognition of persistent solid waste as significant pollutant and particularly as it originates from land-based sources, these obligations clearly include PSWP in the ocean and on land. The Article suggests that "states acting through international organizations or diplomatic conferences endeavor to establish global and regional rules, standards and recommended practices and procedures to meet these obligations." Because the potential economic and environmental consequences of PSWP are not confined to national boundaries and exhibit multi-scalar and temporal mechanisms (da Costa, 2018), international cooperation is of paramount importance for the effective mitigation of land-based sources of PSWP.

The need for an international convention explicitly for the prevention of persistent solid waste pollution is obvious. Between states' obligations to mitigate land-based sources, current conflicting standards and practices, and the potential benefits of technical, financial and enforcement collaboration, it is unquestionable that constructive actions would result from international consensus on PSWP. While a plethora of international agreements exist addressing various forms of pollution, none was conceived explicitly to address the scope and complexity of PSWP. However, proposals to include PSWP under some existing treaties are under consideration, including the Basel, Rotterdam and Stockholm Conventions that address forms of hazardous wastes, toxic chemicals and POPs. While forming a new convention is time consuming and costly, the notion that adding responsibilities as complex as the mitigation of PSWP to existing, more narrowly conceived treaty structures, is counterintuitive. Adding PSWP mitigation commitments calls for vast increases in new expertise, creates unnecessary conflicts in priority setting and funding, leads inherently to sub-divisions of participants and functions, and creates additional levels of decision making rendering the entire effort less effective. We believe the global, technical and economic scope of this issue demands a PSWP Convention that would provide the foundation for future concerted

In contemplating the form of a PSWP Convention, the MARPOL (73/78) Convention may be an appropriate general model. Specifically, within MARPOL (73/78), a Marine Environment Protection Committee (MEPC) was established as a forum for consistent review, clarification and refinement of the various provisions of the Treaty. This mechanism has proven indispensable to the relevance and efficiency of evolving Treaty requirements. The MEPC also provides a forum within which national, industry, and NGO experts work to develop and refine

practical guidelines for the implementation of the many technically complex Treaty requirements. With the possible exceptions of the uniquely difficult maritime (and sovereignty) issues of flag state vs. port state enforcement and the provision of adequate port waste reception facilities, MARPOL and especially its MEPC exemplify the kind of international leadership and coordination needed for PSWP mitigation.

6. Why bother?

So, why should we expend the effort to control the future pollution of all ecosystems by billions of tons of persistent solid waste? There can be no doubt that plastics production will continue to increase, and that waste MIS-management rates will decrease slowly if at all, thus adding substantially to the backlog of disintegrating persistent waste materials already in the environment. At present, actions to mitigate PSWP may be categorized as source reduction or prevention, recovery, reuse, sequestration and destruction. In a mass/balance sense, the global data clearly show current efforts addressing PSWP are fighting a losing battle. This is further exacerbated by rising instability in the international trade and infrastructure systems in place to facilitate high volume plastics recycling (Brooks et al., 2018). It is reasonable to conclude that these activities, while vigorously pursued at some local, and a few national scales are thoroughly inadequate at regional and global scales.

With respect to persistent solid waste pollution of the planet, we are already careening down a one-way street with only partial appreciation of the ultimate environmental costs. Of course, this problem is one of many that we have unwittingly perpetrated on ourselves as we have reaped the myriad benefits of the golden age of petrochemistry. Since it is quite certain that most of us and our progeny will not be in on the emigration to Mars or other exoplanets, it would be prudent to take the big steps needed now to protect natal biosystems from certain incremental degradation. Absent major reorganizations, renewed policy commitments, and significant long-term funding from national governments we will certainly continue down this path.

Despite the increasingly compelling case for the implementation of these recommendations, there does not seem to be a mechanism to bring them to fruition. Arguably, the most powerful engines of change in environmental protection, aside from the scientific community, have been the large environmental NGOs and their supporting foundations. Their ability to marshal public opinion, to disseminate scientific findings, and to create and assure the exercise of existing law is unequaled. Unfortunately, the same compartmentalization and competitive circumstances that plague government agencies also exist in the NGO community. While there is no possibility of mandating coordination among major environmental NGOs, the unifying environmental theme and the inevitable direction of the global PSWP problem indicate the need for this coordination to promote national and global PSWP objectives. We recommend coordinated NGO campaigns include the continuing global lead for civil society for PSWP mitigation and the administration of a global petition to demonstrate to national leaders and legislators the overwhelming public support for long-term measures to address PSWP. Further, high priority must be given to the drafting and promotion of national PSWP policies, of national legislation for PSWP oversight agencies/commissions; and, of an International Convention for the Prevention of PSWP.

Funding

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Author contributions

James M. Coe – Conceptualization, Methodology, Investigation, Resources, Data Curation, Writing Original Draft and Reviewing & Editing, Project Administration.

George "Bud" Antonelis – Conceptualization, Methodology, Validation, Investigation, Writing Review & Editing.

Kirsten Moy – Conceptualization, Validation, Investigation, Resources, Writing Review & Editing, Visualization.

Competing interests

We, the authors, declare no competing interests.

Data and materials availability

All data is available in the main text.

Acknowledgments

The authors would like the thank Margaret Spring, Kyle Antonelis, NOAA's marine debris office, UN Environment Programme, and the supporters and participants of the 6th International Marine Debris Conference in San Diego, CA. We would also like to thank the two anonymous reviewers who provided early feedback in preparation of this manuscript.

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<u>SB-11</u> Submitted on: 2/6/2019 9:17:20 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------------|--------------|-----------------------|-----------------------|--|
| Samantha Berberich | Individual | Support | No | |

Comments:

Aloha,

As an avid beach goer and freediver I'm tired of seeing disgusting beaches and our ocean filled with tons of trash. I feel like my life is consumed by going to beach clean ups and turning my fun dives into trash clean ups. It's unhealthy for our environment and our economy. No tourist wants to hang out on a filty beach or dive/snorkel in polluted waters.

Customers are willing to pay a fee increase for biodegradable packaging.

Mahalo for listening,

Samantha Berberich

To:

Bradford Lum
patrickroyfan@gmail.com; AEN Testimony; CPH Testimony
Testimony in SUPPORT of SB 11
Tuesday, February 5, 2019 5:14:54 PM Subject: Date:

| Zero Waste Hawaii | i - HB 522 |
|--------------------------|---|
| Name | Bradford Lum |
| Email | hawaiianbl@yahoo.com |
| Testimony | Aloha! Thank you committee members for giving this extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. |
| | This bill would put us on a path of accountability and sustainability that our next generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. |
| | Please pass this measure! Mahalo |
| | Respectfully, |

To:

Randy Gonce
patrickroyfan@gmail.com; AEN Testimony; CPH Testimony
Testimony in SUPPORT of SB 11
Tuesday, February 5, 2019 6:07:56 PM Subject: Date:

| Zero Waste Ha | waii - HB 522 | |
|----------------------|---|--|
| Name | Randy Gonce | |
| Email | rgonce@my.hpu.edu | |
| Testimony | Aloha! Thank you committee members for giving this extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. | |
| | This bill would put us on a path of accountability and sustainability that our next generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. | |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. | |
| | Please pass this measure! Mahalo | |
| | Respectfully, | |

To:

Kiana Otsuka
patrickroyfan@gmail.com; AEN Testimony; CPH Testimony
Testimony in SUPPORT of SB 11
Tuesday, February 5, 2019 8:15:53 PM Subject: Date:

| Zero Waste Hawaii | HB 522 | |
|--------------------------|--|--|
| | | |
| Name | Kiana Otsuka | |
| Email Testimony | Aloha! Thank you committee members for giving thi extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. This bill would put us on a path of accountability and sustainability that our nex generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. | |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. It is important to me that we discourage the consumption of single use plastic, because of the environmental impacts caused by the creation of the products, the waste of the products, and the sometimes improper disposal of those products (many of them end up in our oceans and on land, and eventually become microplastics). | |
| | Please pass this measure! Mahalo Respectfully, | |
| | Kiana Otsuka | |

To:

Kerry Campbell
patrickroyfan@gmail.com; AEN Testimony; CPH Testimony
Testimony in SUPPORT of SB 11
Tuesday, February 5, 2019 9:39:51 PM Subject: Date:

| Zero Waste Hawa | aii - HB 522 | |
|------------------------|---|--|
| Name | Kerry Campbell | |
| Email | mrs.kcampbell@yahoo.com | |
| Testimony | Aloha! Thank you committee members for giving this extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. | |
| | This bill would put us on a path of accountability and sustainability that our next generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. | |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. | |
| | Please pass this measure! Mahalo | |
| | Respectfully, | |

From: Claire Muskopf

To: patrickroyfan@gmail.com; AEN Testimony; CPH Testimony

Testimony in SUPPORT of SB 11

Subject: Date: Wednesday, February 6, 2019 8:01:07 AM

| Zero Waste Ha | waii - HB 522 |
|----------------------|---|
| Name | Claire Muskopf |
| Email | senditbecause@gmail.com |
| Testimony | Aloha! Thank you committee members for giving this extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. |
| | This bill would put us on a path of accountability and sustainability that our next generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. |
| | Please pass this measure! Mahalo |
| | Respectfully, |

<u>SB-11</u>

Submitted on: 2/6/2019 9:20:09 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing | |
|--------------|--------------|-----------------------|-----------------------|--|
| Ryan Cameron | Individual | Support | No | |

Comments:

Please take steps to reduce our use of single use plastics. They are polluting the seas and damaging aquatic life. The micro plastic detritus from aged single use and other plastic rubbish is negatively effecting the marine ecosystem at the base level. This effect is harming every level of marine life. We all depend on marine life as a food source. We need to protect and nourish the marine ecosystems so that our children for generations to come will continue to be able to sustain themselves and their families from the sea.

We don't need all this plastic. There are and will be better alternatives. Let's make Hawaii a leader and example to the rest of the world. Let's create the industry to supply Hawaii and the world with biodegradable products . We can protect the sea, boost the local economy with new industry, AND, still enjoy one ONO plate lunch to go. $\eth \ddot{\nabla} \mathbf{x}^{\mathsf{TM}} \eth \ddot{\nabla} \bullet \frac{1}{2}$

<u>SB-11</u> Submitted on: 2/6/2019 10:18:48 AM

Testimony for AEN on 2/6/2019 1:45:00 PM



| Submitted By | Organization | Testifier Position | Present at Hearing | |
|-------------------|--------------|-----------------------|-----------------------|--|
| Kennedy-Anne Marx | Individual | Support | No | |

Comments:

Hawai'i needs to take lead and start to promote sustainable mindsets when the rest of the country may be failining.



<u>SB-11</u> Submitted on: 2/6/2019 10:26:59 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|------------------|--------------|-----------------------|-----------------------|
| Xenia de Feminis | Individual | Support | No |

Comments:

As a California resident living in a hawaii i am astounded at how much styrofoam is used. The bay area has successfully navigated with no styrofoam since 2012 and it has done measures for the environment. I hope Hawaii can do the same to help with the non degradable trash items



<u>SB-11</u>

Submitted on: 2/6/2019 10:41:51 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Lily Washburn | Individual | Support | No |

Comments:

Aloha Chair Gabbard, Vice-Chair Ruderman, and committee members,

My name is Lily Washburn, and I'm a student at SEEQS: The School for Examining Essential Questions of Sustainability, a charter school in Kaimuki. I'm writing to say that I strongly support SB11.

I support this bill because it hurts me to see how careless people can be when it comes to the health of our beautiful islands. If people continue to use and produce polystyrene containers, it may have detrimental effects on our health, and the environment.

As a student who is very much concerned with the increasing amount of plastic waste causing harm to wildlife, and building up in natural ecosystems, I can say that this bill would be a huge step towards a more environmentally safe future.

Thank you in advance for your consideration of this serious issue.



<u>SB-11</u> Submitted on: 2/6/2019 10:44:47 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------------|--------------|-----------------------|--------------------|
| Juanita Kawamoto Brown | Individual | Support | No |

Comments:

I AM IN STRONG SUPPORT OF THIS LEGISLATION.



<u>SB-11</u> Submitted on: 2/6/2019 11:27:28 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------|--------------|-----------------------|-----------------------|
| Hunter Akamine | Individual | Support | No |

Comments:

I support the styrofoam ban because I want the future of Hawaii to be safe.



<u>SB-11</u>

Submitted on: 2/6/2019 11:48:54 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|--------------|-----------------------|-----------------------|
| Addison Davis | Individual | Support | No |

Comments:

SB 11 Testimony:

Hearing Date: Wednesday, February 6th, 2019

Hearing Time: 1:45 PM

Place: Conference Room 224

Committee: Agriculture & Environment

Aloha Chairs Gabbard, Member of the committee on Agriculture and the Environment

My name is Addison Davis, I'm 19 years old, and I am a resident of Kailua. I am writing from the University of Vermont, where I study Environmental Studies in the Rubenstein School of the Environment and Natural Resources, where I stand in full support of SB11 to prohibit the use of polystyrene foam containers by food vendors statewide.

I had the privilege of attending the IUCN World Conservation Congress in September of 2016. At the opening ceremony, Governor David Ige introduced the Sustainable Hawai'i Initiative, which sets a goal of Hawai'i transferring to clean, renewable energy by 2045. Though depicted as a "clean energy solution" for Hawai'i, the burning of plastics at the H-Power Covanta plant produces .15 million metrics tons of carbon dioxide annually through the burning of plastics. This increases the severity of Climate Change, which is being felt today with the impending sea level rise facing our islands. Styrofoam is costing taxpayers millions of dollars to remove from storm drains, as styrofoam and plastic bags are the top two contributors to the waste stream in Hawai'i.

By banning food vendors from serving or packaging prepared food in polystyrene foam containers we will see a ten percent reduction of the highways division's total cleanup costs of litter in the State.

We are a currently a planet at the crossroads. At university, we often talk about what sustainability means. In my eyes, sustainability is the combination of ecological and human flourishing. Sustainability means meeting the needs of present generations, without compromising the ability of future generations to meet their needs.

The decisions made here today will impact my future, I simply urge you to stand on the side of history that stands for our planet which supports us all.

Thank you for your time

Addison Davis

Addison.Davis@uvm.edu

198 Awakea Rd, Kailua, Hi, 96734

Harris 414, 67 Spear St, Burlington, VT, 05405



<u>SB</u>-11

Submitted on: 2/6/2019 11:53:38 AM

Testimony for AEN on 2/6/2019 1:45:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------|--------------|-----------------------|-----------------------|
| Chandra Bertsch | Individual | Support | No |

Comments:

Aloha my name is Chandra Bertsch, General Manager of Holo Holo Charters, and I am submitting testimony as part of the Surfrider Foundation Ocean Friendly Restaurants program in strong support of SB11, to prohibit the sale of polystyrene foam containers and serving prepared foods using polystyrene foam containers. Polystyrene foam is one of the most littered and least recycled forms of plastic and we cannot even recycle it here in Hawaii. The excuse and myth of it being recycled needs to end this year. To become an Ocean Friendly Restaurant, restaurants have to meet 7 mandatory criteria, one

of which being No Polystyrene takeout containers (see full criteria list below). The Ocean

Friendly Restaurants (OFR) program was launched in April 2016 and in a matter of 3 short

years we have had over 200 restaurants in Hawaii make the commitment to go without polystyrene foam containers. The OFR program and local restaurants set the precedent for this

movement, leading to the launch of the national OFR program in August 2017. There are now

over 400 restaurants nationwide that meet the criteria and have joined as members. The OFR program has successfully helped restaurants become polystyrene-free with owners

who want to do good and operate on a sustainable business model. None of these restaurants

have reported financial burden from going foam-free and there is a community of volunteers

who help make the transition easy and cost effective for the restaurants.

The economic benefit of the polystyrene ban also extends beyond restaurant owners, as many

of Hawaii's main suppliers of compostable food-grade products are Hawaiian-based businesses, such as Jimmy's Sales (Kauai), Ventures Associates (Kauai), and Sustainable

Island Products (Big Island).

Companies like these, as well as the over 200 Ocean Friendly Restaurants across the state, are

local businesses providing quality service to residents and visitors by being conscious of the

food they serve as well as the containers they come in. Supporting these purveyors supports

local business owners.

Furthermore, SB11 is a step in the right direction to protect the environment, support Hawaii's

resiliency goals, and ensure the longevity and continued success of our local economy. Hawaii is ready for a future without Polystyrene foam. Mahalo for your consideration of this

testimony and of this important issue.

From: <u>Katharina Anhalt</u>

To: <u>patrickroyfan@gmail.com</u>; <u>AEN Testimony</u>; <u>CPH Testimony</u>

Subject: Testimony in SUPPORT of SB 11

Date: Wednesday, February 6, 2019 10:25:21 AM



| Zero Waste Hawaii - HB 522 | | |
|----------------------------|---|--|
| Name | Katharina Anhalt | |
| Email | Katharina.anhalt8@gmail.com | |
| Testimony | Aloha! Thank you committee members for giving this extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. | |
| | This bill would put us on a path of accountability and sustainability that our next generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. | |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. | |
| | Please pass this measure! Mahalo | |
| | Respectfully, Katharina Anhalt | |

From: Donna Lay

To: patrickroyfan@gmail.com; AEN Testimony; CPH Testimony

Subject: Testimony in SUPPORT of SB 11

Date: Wednesday, February 6, 2019 10:39:35 AM



| Zero Waste Hawai | ii - HB 522 |
|-------------------------|---|
| Name | Donna Lay |
| Email | donnarlay@gmail.com |
| Testimony | Aloha! Thank you committee members for giving this extremely important measure a hearing. I am writing in STRONG SUPPORT of HB 522. |
| | This bill would put us on a path of accountability and sustainability that our next generations desperately need. It is our duty to steward this place and do our best to be grow and be better leaving earth better than we came into the world. |
| | We owe it to our children to become a Zero Waste society. This is about behavioral change that can happen. The phasing out of the waste outlined in this measure is a great way to do that and have adequate time to inform residents. |
| | Please pass this measure! Mahalo |
| | Respectfully, |