

DAVID Y. IGE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621  
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**Testimony of**  
**SUZANNE D. CASE**  
**Chairperson**

**Before the House Committee on**  
**OCEAN, MARINE RESOURCES & HAWAIIAN AFFAIRS**

**Tuesday, February 14, 2017**  
**8:30 AM**  
**State Capitol, Conference Room 312**

**In consideration of**  
**HOUSE BILL 818, HOUSE DRAFT 1**  
**RELATING TO OXYBENZONE**

House Bill 818, House Draft 1, proposes to require advertisements or displays for sunscreen containing oxybenzone in the State to include a conspicuously displayed statement that the sunscreen product contains chemicals which may harm coral reefs. **The Department of Land and Natural Resources (Department) appreciates the intent and defers to the Department of Health on issues associated with enforcement of this measure.**

The Department recognizes the concerns about the presence of oxybenzone in the water and its effects on corals. The bill limits the warning language to only those advertisements or displays that are already in use for sunscreens containing oxybenzone. There appears to be a large gap for sunscreens that are being imported by the user or sunscreens where an advertisement or display does not currently exist.

The Department is conducting outreach efforts to help the public understand the issues regarding using oxybenzone in the ocean so they can be better informed and make better choices regarding sun protection. Our outreach efforts to the public have included organizing a session at the International Union for Conservation of Nature conference on the effects and use of oxybenzone, focused one-on-one outreach at the 'Āhihi-Kīna'u Natural Area Reserve, news releases, videos, information on the Department's Division of Aquatic Resources website, distribution of oxybenzone-free sunscreen samples at public events, interaction with partner organizations, and meetings with dermatologists, boat tour operators, and vendors who sell sunscreen to spread the word. These efforts are just the beginning, and the Department continues to explore other ways to inform the public on this issue.

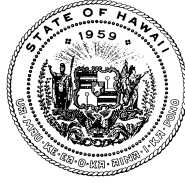
Thank you for the opportunity to comment on this measure.

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

**KEKOA KALUHIWA**  
FIRST DEPUTY

**JEFFREY T. PEARSON P.E.**  
DEPUTY DIRECTOR - WATER

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BOATING AND OCEAN RECREATION  
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KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. Box 3378  
Honolulu, HI 96801-3378  
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**Testimony COMMENTING on H. B. 818, H.D. 1**

**RELATING TO OXYBENZONE**

REPRESENTATIVE KANIELA ING, CHAIR  
HOUSE COMMITTEE ON OCEAN, MARINE RESOURCES & HAWAIIAN AFFAIRS

Hearing Date: February 14, 2017  
Time: 8:30 am

Room Number: 312

1 **Fiscal Implications:** We support this initiative as long as it does not replace our priorities  
2 requested in the Executive Budget. In addition, the enforcement of this measure may compete  
3 with limited resources that are currently dedicated to safeguarding human health and safety.

4 **Department Testimony:** The Department supports the intent of H. B. 818 H.D. This measure  
5 seeks to amend HRS 328 to require advertisements or displays for sunscreen containing  
6 oxybenzone to include the following conspicuously displayed statement, "Product contains  
7 chemicals which may harm coral reefs."  
8

9 The Department of Health is concerned about the release of chemicals, including oxybenzone,  
10 from personal care products into the marine environment, and believes efforts to educate the  
11 public about alternatives would be useful. Research by local and national coral experts have  
12 shown that levels of oxybenzone in the marine environment may be high enough to pose  
13 deleterious effects on coral, and may exacerbate coral bleaching.

14 At the same time, oxybenzone plays a very important role in reducing the risk of some forms of  
15 skin cancer. There is potential public health risks associated with directing consumers away from  
16 the leading wide-spectrum UV protection agent. The Department is hesitant to amend Chapter  
17 328 and take on responsibility for this labelling requirement without having a clear  
18 understanding of the safety, efficacy and user acceptance of alternative sunscreen products to  
19 protect public health. Further, implementation of this measure by the Department would take  
20 away limited resources from other critical public health priorities.

21 We support DLNR's public education and outreach efforts to inform Hawaii beachgoers about  
22 steps that they can take to reduce the use of sunscreen containing oxybenzone while enjoying our  
23 beaches in Hawaii.

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



**HB818 HD1  
RELATING TO OXYBENZONE**

House Committee on Ocean, Marine Resources, & Hawaiian Affairs

February 14, 2017

8:30 a.m.

Room 312

The Office of Hawaiian Affairs (OHA) Beneficiary Advocacy and Empowerment Committee will recommend that the Board of Trustees **SUPPORT** HB818 HD1, which would seek to mitigate the impacts of oxybenzone on our coral reefs.

**Hawai‘i’s coral reefs and nearshore resources form the bedrock of our islands.**

Hawai‘i’s marine environment and natural resources serve as a cultural, socioeconomic, and scientific foundation for these islands. OHA notes that economic studies in 2002 and 2003 found an overall contribution of \$800 million in revenue generated from our coral reefs and coastal resources, with an added recreational, amenity, fishery, biodiversity and educational value of \$364 million per year. A more recent report released in 2011 utilizing “innovative economic survey techniques” found that across U.S. households, the economic value of protecting Hawai‘i’s nearshore environment could be estimated at \$34 billion a year. While our ocean waters clearly hold cultural, spiritual, and biological significance beyond any monetary value, these economic analyses clearly reflect the critical nature of our marine environment to our islands.<sup>1</sup>

**This measure represents a small step towards ensuring greater resilience in our coral reefs and nearshore waters.** With the overarching threats of climate change and a growing population base, it is incumbent upon the state and its residents to ensure that our foundational nearshore resources are sufficiently resilient, to best withstand the inevitably increasing pressures that will be placed upon them. While oxybenzone is just one of

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<sup>1</sup> See Carlie S. Weiner, Mark D. Needham, & Paul Wilkinson, *Hawaii's real marine life park: interpretation and impacts of commercial marine tourism in the Hawaiian Islands*, 12 CURRENT ISSUES IN TOURISM 489, 489-90 (2009) citing P.J. van Beukering & H.S. Cesar, *Ecological economic modeling of coral reefs: Evaluating tourist overuse at Hanauma Bay and algae blooms at the Kihei Coast, Hawai‘i* 58 PAC. SCIENCE 243 (2007); A.M. Friedlander et. al., *The state of coral reef ecosystems of the main Hawaiian Islands* in THE STATE OF CORAL REEF ECOSYSTEMS IN THE UNITED STATES AND PACIFIC FREELY ASSOCIATED STATES 222-269 (2005), K. DAVIDSON, M. HAMNET, & C. MINATO, ECONOMIC VALUE OF HAWAII'S NEARSHORE REEFS (2003), available at [http://nature.forestry.oregonstate.edu/sites/default/files/2009-2%20CIT%20-%20Wiener%20Needham%20Wilkinson%20\(2009\).pdf](http://nature.forestry.oregonstate.edu/sites/default/files/2009-2%20CIT%20-%20Wiener%20Needham%20Wilkinson%20(2009).pdf); HERMAN CESAR ET. AL, ECONOMIC VALUATION OF THE CORAL REEFS OF HAWAII FINAL REPORT 74 (2002), available at [http://www.coralreef.gov/meeting18/evhcri\\_samoa\\_2007.pdf](http://www.coralreef.gov/meeting18/evhcri_samoa_2007.pdf); RICHARD C. BISHOP ET. AL., TOTAL ECONOMIC VALUE FOR PROTECTING AND RESTORING HAWAIIAN CORAL REEF ECOSYSTEMS: EXECUTIVE SUMMARY (2011), available at [http://coralreef.noaa.gov/aboutcrp/news/featuredstories/oct11/hi\\_value/resources/protecting\\_restoring\\_hawaiian\\_cre.pdf](http://coralreef.noaa.gov/aboutcrp/news/featuredstories/oct11/hi_value/resources/protecting_restoring_hawaiian_cre.pdf).

many stressors on our coral reefs, reducing the prevalence of this known chemical threat through public educational initiatives is a small yet positive step towards ensuring such greater resilience. Notably, this measure may not only directly reduce the impacts of oxybenzone on our most popular nearshore areas, but its passage may also promote greater public awareness of the need to better protect the resources we so substantially rely upon.

Accordingly, OHA urges the Committee to **PASS** HB818 HD1. Thank you for the opportunity to testify on this measure.



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

## COMMITTEE ON OCEAN, MARINE RESOURCES & HAWAIIAN AFFAIRS

Tuesday, February 14, 8:30 a.m., Conference Room 312  
HB818 HD1, RELATING TO OXYBENZONE

### TESTIMONY

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

Chair Ing, Vice-Chair Gates, and Committee Members:

**The League of Women Voters of Hawaii supports HB818 HD1** that requires advertisements or displays for sunscreen containing oxybenzone in the State to include a conspicuously displayed statement that the sunscreen product contains chemicals which may harm coral reefs.

The League has long-held positions that both promote the management of natural resources as interrelated parts of life-supporting ecosystems and preserve the physical, chemical and biological integrity of the ecosystem, with maximum protection of public health and the environment.

While visitors and residents are always cautioned to apply sunscreen to protect themselves against Hawaii's vibrant sunshine, tests have shown that sunscreens containing the chemical oxybenzone have been found to harm coral reefs by leaching the coral of its nutrients and bleaching it white. It can also disrupt the development of fish and other wildlife.

A very recent study by a group of international scientists and published in this month's edition of the *Archives of Environmental Contamination and Toxicology* found oxybenzone in high concentrations in the waters around the more popular coral reefs in Hawaii. The chemical not only kills the coral, it deforms the DNA in coral in the larval stage, making it unlikely they can develop properly.

It's no secret that Hawaii's coral reefs are in trouble, not only from oxybenzone but from higher ocean temperatures, overfishing, sedimentation, and nutrient pollution that all contribute to coral mortality rates.

But if one of the threats to coral reefs can be removed by the elimination of oxybenzone in sunscreen, then progress will have been made to protect this most productive marine ecosystem that supports commercial and recreational fisheries and tourism, in addition to protecting coastlines from storm surge.

There are other options to sunscreens containing oxybenzone, such as sunscreens made with titanium oxide or zinc oxide, which are natural mineral ingredients.

But there are no options to coral reefs. Once they're gone, they're gone.

Thank you for the opportunity to submit testimony.



**Conservation Council  
for Hawai'i**

*Hawai'i's voice for wildlife*

*Kō Hawai'i leo no nā holoholona lōhiu*



Testimony Submitted to the House Committee on Ocean, Marine Resources, and Hawaiian Affairs  
By the Conservation Council for Hawai'i  
Hearing: Wednesday, February 14, 2017 8:30 am  
Room 312

### Support for the Intent of HB 818 HD 1 Relating to Oxybenzone

Chair Ing, Vice Chair Gates, and Members of the Committee,

Aloha. The Conservation Council for Hawai'i supports the intent of HB 818 HD 1, which requires advertisements or displays for sunscreen containing oxybenzone in the State to include a conspicuously displayed statement that the sunscreen product contains chemicals which may harm coral reefs. (HB 818 HD 1).

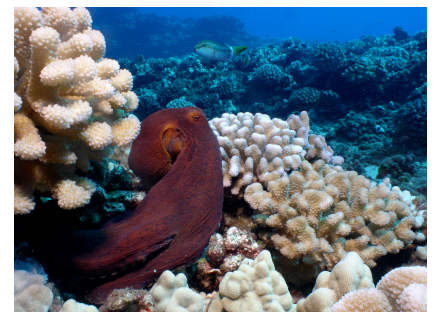
We support a complete ban on sunscreen containing oxybenzone instead of focusing on warnings and disclosure. Presumably, the goal of the disclosure is to discourage the use of sunscreen containing harmful chemicals to our reefs. A ban is more effective in reaching this goal.

Our reefs are already stressed. Additional coral bleaching by oxybenzone can be avoided. There are alternative products.

Please help save our coral reef ecosystems, and pass HB 818 HD 1. Mahalo nui loa for the opportunity to testify.

*Marjorie Ziegler*

Marjorie Ziegler



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President: Wayne Tanaka | Vice President: Koalani Kaulukukui | Secretary: Rachel Sprague  
Treasurer: Les Welsh | Director: Anne Walton  
Executive Director: Marjorie Ziegler | Administrator: Jonnetta Peters



Testimony of The Nature Conservancy of Hawai'i  
Supporting H.B. 818 HD1 Relating to Oxybenzone  
House Committee on Ocean, Marine Resources, & Hawaiian Affairs  
Tuesday, February 14, 2017, 8:30AM, Room 312

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*The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. We manage 40,000 acres in 14 preserves and work in 19 coastal communities to help protect the near-shore reefs and waters of the main Hawaiian Islands. We forge partnerships with government, private parties and communities to protect Hawai'i's important watershed forests and coral reefs.*

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**The Nature Conservancy supports H.B. 818 HD1** requiring warning statement on all advertisements or displays for sunscreen containing oxybenzone. Preliminary research indicates that there may be a connection between sunscreen containing oxybenzone and degraded reef health. Further research and analysis is warranted, and the precautionary principle suggests that we do what we can to minimize this potential threat.

**However, while removing oxybenzone from Hawai'i's beaches and nearshore areas may help our reefs, it is only a first step. Support for this measure should not stop us from doing the hard work that is needed to protect our coral reefs and nearshore fisheries from the clear and present danger of additional chemicals, nutrients and sediment entering our nearshore waters, invasive algae smothering our reefs, and unsustainable fishing practices depleting our local fisheries. With the added threats from global climate change predicted to increase over the next 50 years, the need to protect our reefs and other aquatic resources has never been more urgent.**

Hawai'i's nearshore waters are home to more than 7,000 forms of marine life, a quarter of them found nowhere else on Earth. Our vast coral reefs and entire near shore ecosystem are valuable assets that contribute culturally and economically to Hawai'i's future. Coral reef ecosystems create habitat for many fish species with important subsistence, recreational and commercial value; support tourism and recreational industries; and shelter coastlines from natural disturbances. Our life and lifestyle in Hawai'i depends upon a healthy and thriving marine environment.

While we appreciate the many bills this session proposing to regulate or study oxybenzone, **we also urge the Legislature to continue supporting efforts to address the full range of threats to our reefs, fisheries and other marine resources. These actions include:**

- Sufficient funding and personnel for the Department of Land and Natural Resources to:
  - Implement existing and develop additional marine management rules to protect and restore our coastal fisheries;
  - Build compliance with and enforcement of existing marine management rules and laws;
  - Collaboratively develop a strategic plan to address coral bleaching and guide management decisions;
  - Obtain the information needed to continue adaptively managing coastal resources based on the best available science and traditional knowledge; and
  - Build on its on-the-ground and in-water management work with partners to care for coastal and marine resources.
- Supporting the efforts of coastal communities around the islands that are working to co-manage their resources in partnership with the DLNR.

Thank you for the opportunity to testify on this measure.

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TO: COMMITTEE ON OCEAN, MARINE RESOURCES, & HAWAIIAN AFFAIRS  
Rep. Kaniela Ing, Chair  
Rep. Cedric Asuega Gates, Vice Chair

FROM: HAWAII FOOD INDUSTRY ASSOCIATION  
Lauren Zirbel, Executive Director

DATE: Tuesday, Feb. 14, 2017  
TIME: 8:30 a.m.  
PLACE: CR 312

RE: HB 818 RELATING TO OXYBENZONE

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.

Sunscreen is a first line of defense for individuals seeking protection from the sun's cancer causing UV rays. Banning the use of oxybenzone, an important UV filter ingredient, in Hawaii will drastically reduce the selection of sunscreen products available to Hawaii residents and visitors. The combination of reduced choice and less effective products could have the dangerous consequence of individuals using less protective sunscreens or worse no longer using sunscreen, thereby causing more skin damage and potentially increasing skin cancer rates.

**Oxybenzone Background**

Oxybenzone is a safe and effective ingredient found in some of the most popular sunscreens and lotions on the market today. It is a sunscreen ingredient that protects users from both ultraviolet A (UVA) and ultraviolet B (UVB) rays that often contribute to skin cancer.

In addition to avoiding sun exposure and covering up when in direct sun light, sunscreens are a vitally important tool for individuals seeking to protect their skin against sun damage and to reduce the risk of America's most common cancer – melanoma. Oxybenzone containing sunscreens also protect against other forms of skin cancer. Some popular sunscreen products containing oxybenzone include: Coppertone, ChapStick, Blistex, Hawaiian Tropic Lotion Sunscreen, Aveeno Moisturizing Lotion, SoftLips Cube, Neutrogena lotions and sunscreen.

The Food and Drug Administration (FDA) has approved 16 sunscreens, of which only 2 provide effective UVA protection. Oxybenzone has been widely used in sunscreens for decades. Oxybenzone is effective in screening against UVB rays which are associated with sunburns, especially in areas near the equator and with high elevations, such as some areas in the Hawaiian Islands.

Cumulative exposure to UVA and UVB rays is known to cause skin cancer so it is important to use sunscreens that protect against both – like Oxybenzone. The FDA acknowledges the research that shows sunscreens aid in decreasing the risk of developing skin cancers and early skin aging.

### **The Impacts of Skin Cancer**

Over 5 million cases of non-melanoma skin cancer are treated in more than 3 million Americans every year. Every year there are more cases of skin cancer than the combined incidents of breast cancer, prostate cancer, lung cancer, and colon cancer combined.

Over the last 30 years, more people have experienced skin cancer than all other cancers combined. One out of five Americans will develop skin cancer in their lifetime. One person dies of melanoma every hour. Melanoma accounts for less than 1 percent of skin cancer cases, but accounts for the vast majority of skin cancer deaths. The sun causes the vast majority of melanomas. A person's risk of melanoma doubles if he or she has had more than five sunburns. Hawaii has about 200 new cases of melanoma a year, and about 20 people die from it annually. Hawaiian tourism is one of the state's largest industries, and these numbers do not include cases observed amongst those visitors.

### **Oxybenzone And The Environment**

The exposure of the environment to cosmetic and personal care products is relatively low compared to contaminants from other industrial sectors. There is no scientific evidence that sunscreen ingredients, including oxybenzone, contribute to the decline of native coral reef colonies. **According to the U.S. National Oceanic and Atmospheric Administration's (NOAA) Coral Reef Conservation Program, coral reefs are threatened by an increasing array of impacts – primarily from global climate change, unsustainable fishing and other factors. Increasing ocean temperature and acidification, overfishing, coastal development and pollution are well known stressors on coral reefs.** They may induce coral bleaching, a process by which corals lose their symbiotic microalgae.

Ultimately, corals may die when these stressful environmental conditions last too long. Weakened corals, more susceptible to infectious diseases, show poor resilience from episodic bleaching events. Some studies have reported that certain UV filters contained in sunscreens lotions and washed off by swimmers, could contribute to coral bleaching. Studies have shown that five weeks of chronic exposure to these UV filters at concentrations above those reported in natural sea waters, did not induce coral bleaching nor reduce the photosynthetic efficiency of the symbiotic micro-algae.<sup>1</sup>

A higher standard of evidence must be met before the legislature bans products, which help individuals easily wear sunscreen every day to prevent skin cancer. Oxybenzone is an extremely effective ingredient that rubs in clear and is contained in many of consumer's favorite every day choices for sunscreen. Thank you for the opportunity to testify.

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<sup>1</sup> 26th Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC), conducted at La Cité Nantes Congress Center in Nantes, France, from 22 - 26 May 2016

#### **Predictive laboratory methodology to assess coral bleaching: application to UV filters**

J. Fel, L'Oréal Research & Innovation, Aulnay-sous-Bois, France / Environmental Research; M. Leonard, L'Oréal SA

Increasing ocean temperature and acidification, overfishing, coastal development and pollution are well known stressors on coral reefs. They may induce coral bleaching, a process by which corals lose their symbiotic microalgae (zooxanthellae). Ultimately, corals may die when these stressful environmental conditions last too long. Weakened corals, more susceptible to infectious diseases, show poor resilience from episodic bleaching events. Some studies have reported that certain UV filters (mostly 4-methylbenzylidene-camphor, benzophenones and octylmethoxycinnamate) contained in sunscreens lotions and washed off by swimmers, could contribute to coral bleaching. Media took it for granted and suspicion has been extended to all organic UV filters present in sunscreens products. The present study was aimed at clarifying the potential effect that organic UV filters (such as Avobenzone, Octocrylene, Terephthalylidene-dicamphor sulfonic acid, Silatrizole, etc...) may have on different coral species. Two herbicides (Monuron and Diuron) were used as positive references. First a preliminary laboratory screening test was developed to assess potential adverse effect of short exposure (48h) to elevated concentrations (from 1 to 100 mg/L) of the compounds. As a sublethal endpoint predictive of coral bleaching, chlorophyll photosynthetic efficiency of the symbiotic micro-algae (zooxanthellae) was monitored with PAM (Pulse Amplitude Modulated) fluorimetry on nubbins of hard coral species *Seriatopora caliendrum* and *Stylophora pistillata*. In a second step, coral nubbins of *Stylophora pistillata* (hard coral) and *Turbinaria reniformis* (soft coral) were exposed for 5 weeks at lower concentrations in 15 liters aquariums, under semi static conditions with weekly solution renewal. **A specific analytical methodology was developed, combining automated solid phase extraction with UPLC-UV detection, to monitor the compounds concentrations in sea water and analyze large number of samples. 5 weeks of chronic exposure to these UV filters at concentrations above those reported in natural sea waters, did not induce coral bleaching nor reduce the photosynthetic efficiency of the symbiotic micro-algae.**



# SIERRA CLUB OF HAWAI'I

**MĀLAMA I KA HONUA. *Cherish the Earth.***

## HOUSE COMMITTEE ON OCEAN, MARINE RESOURCES, AND HAWAIIAN AFFAIRS

Tuesday, February 14, 2017 8:30 AM Room 312

### COMMENTS ON HB 818 Relating to Oxybenzone

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Aloha Chair Ing, Vice Chair Gates, and members of the OMH Committee,

The Sierra Club of Hawai'i would like to provide comments on HB 818, which would require advertisement or displays for products containing oxybenzone to say "product contains chemicals that may harm coral reefs." While we support the intention of this Bill to educate consumers about the harmful effects that oxybenzone has on our reef ecosystems, we believe that advertisements alone are insufficient in decreasing the amount of oxybenzone that will ultimately enter our beaches and waterways, especially as oxybenzone is added to 70 percent of non-mineral sunscreens.<sup>1</sup>

Oxybenzone damages coral DNA and inhibits its ability to reproduce, causes deformities on the coral, makes coral more susceptible to bleaching, and initiates endocrine disruption.<sup>2</sup> These pathologies can occur at concentrations as low as 62 parts per trillion, but some beaches in Hawai'i have oxybenzone levels higher than 700 parts per trillion<sup>3</sup>, a major concern when our reef system annually generates about \$800 million in gross revenues.<sup>4</sup>

The Department of Land and Natural Resources already has an educational and outreach campaign to curb the usage of oxybenzone products and promote reef-safe alternatives. What the state needs is more than educational advertisements and displays, we need a ban of these products to ensure that this harmful chemical is not sold and distributed in Hawai'i.

Thank you very much for this opportunity to provide testimony on this important issue.

Mahalo,

Martha Townsend  
Director

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<sup>1</sup> <http://www.ewg.org/sunscreen/report/the-trouble-with-sunscreen-chemicals/>

<sup>2</sup> Downs CA, Kramarsky-Winter E, Segal R, et al. Toxicopathological Effects of the Sunscreen UV Filter, Oxybenzone (Benzophenone-3), on Coral Planulae and Cultured Primary Cells and Its Environmental Contamination in Hawaii and the U.S. Virgin Islands. *Arch Environ Contam Toxicol* 2015 Oct 20. doi: 10.1007/s00244-015-0227-7.

<sup>3</sup> <http://www.marinesafe.org/blog/2016/05/12/how-sunscreen-is-putting-coral-reefs-at-risk/>

<sup>4</sup> [http://www.hawaii.edu/ssri/cron/files/econ\\_brochure.pdf](http://www.hawaii.edu/ssri/cron/files/econ_brochure.pdf)

February 13, 2017

The Honorable Kaniela Ing  
Chairman, Committee on Ocean, Marine Resources, and Hawaiian Affairs  
Hawaii State Capitol, Room 427  
415 South Beretania Street  
Honolulu, HI 96813

**RE: Opposition to HB 818 – relating to oxybenzone**

Dear Chairman Ing:

On behalf of the Consumer Healthcare Products Association (CHPA), I am writing to express strong opposition to HB 818, relating to oxybenzone and under consideration by the Committee on Ocean, Marine Resources, and Hawaiian Affairs on Tuesday, February 14th. This piece of legislation requires advertisements or displays for sunscreen containing oxybenzone in the State to include a conspicuously displayed statement that the sunscreen product contains chemicals which may harm coral reefs. Oxybenzone is a Food and Drug Administration (FDA) approved ingredient found in many personal care products including sunscreen. While we applaud attempts to limit coral decline in Hawaii, we have strong reservations of doing so by requiring signage which may inadvertently dissuade consumers from seeking sun screen treatment to avoid deadly skin cancers.

CHPA is the 135-year-old national trade association representing the leading manufacturers and marketers of over-the-counter (OTC) medicines and dietary supplements. Every dollar spent by consumers on OTC medicines saves the U.S. healthcare system \$6-\$7, contributing a total of \$102 billion in savings each year. CHPA is committed to empowering consumer self-care by preserving and expanding choice and availability of consumer healthcare products.

Oxybenzone is a safe, and effective ingredient approved by the FDA in 1978 and found in nearly 2000 personal care products on the market today including some of the most popular sunscreens, lip balms, and lotions designed to guard against sun damage. In fact, oxybenzone offers broad spectrum protection against both ultraviolet A (UVA) and ultraviolet B (UVB) rays that often contribute to skin cancer. Some popular sunscreen products containing oxybenzone include Coppertone, ChapStick, Blistex, Hawaiian Tropic Lotion Sunscreen, Aveeno Moisturizing Lotion, SoftLips Cube, Neutrogena lotions and countless other shampoos, conditioners, lipsticks, body washes, hairsprays, aftershaves, and more.

**Importance of Protection Against Skin Cancer**

The most common form of cancer is skin cancer. Every year there are more cases of skin cancer in the United States than the combined incidents of breast cancer, prostate cancer, lung cancer, and colon cancer combined. In fact, over the last 30 years, more people have experienced skin cancer than all other cancers combined. One out of five Americans will develop skin cancer in their lifetime, and one person dies of melanoma (the deadliest form of skin cancer) every hour. The vast majority of melanomas are caused by the sun, and a person's risk of melanoma doubles if he or she has had more than five sunburns. When used as directed, sunscreens containing oxybenzone on the market today have proven to be very effective in protecting skin against the sun's harmful rays. The FDA has acknowledged research that shows sunscreens aid in decreasing the risk of developing skin cancers and early skin aging. The FDA recommends use of a broad spectrum sunscreen with sun protection factor (SPF) values of 15 or higher regularly and as directed to protect against ultraviolet A sun rays as provided by oxybenzone sunscreen products. In order to get ultra-high SPF, oxybenzone is required to serve as a stabilizer for other sunscreen ingredients in sunscreen. Without it, high SPF may not be achieved.

**Oxybenzone and the Environment**

Despite recent headlines highlighting coral decline and the impacts of oxybenzone on that deterioration, there is disagreement within the scientific community on the linear relationship between the two. A number of studies have examined coral reef bleaching and have concluded a number of factors at fault for global coral reef decline. Some

of the primary reasons include climate change (ocean temperature)<sup>1</sup>, and pollution runoff.<sup>2</sup> Even Craig Downs of the Haereticus Environmental Laboratory in Virginia and primary author of a study on coral reef decline published in the Archives of Environmental Contamination and Toxicology admitted in an interview that “agriculture run-off and sewage are probably responsible for the historical collapse of coral reefs for the past 40 years.”<sup>3</sup> Ultimately, global climate change presents the greatest stress to the world’s coral reef. Other factors like over-fishing, agricultural practices, and sewage are also to blame. Terry Hughes, director of the Australian Research Council Centre of Excellence for Coral Reef Studies at James Cook University suggests that extrapolations asserting sunscreen is damaging the world’s coral “are a bit of a stretch.”<sup>4</sup> He continues, “the conclusion from the media is sunscreen is killing the world’s coral, and that’s laughable.”<sup>5</sup>

There is no scientific evidence that under naturally-occurring environmental conditions, sunscreen ingredients are contributing to coral degradation. According to the U.S. National Oceanic and Atmospheric Administration’s (NOAA) Coral Reef Conservation Program, coral reefs are threatened by an increasing array of impacts – primarily from global climate change, unsustainable fishing and other factors. Increasing ocean temperatures, acidification, overfishing, coastal development and pollution are well known primary stressors of coral reef.

### **Opportunity Cost**

Over-the-counter sunscreen containing oxybenzone is an affordable, accessible first line of defense for individuals seeking protection from the sun’s cancer causing UV rays. Requiring burdensome, often misleading signage requirements, could have the dangerous unintended consequence of individuals using less protective sunscreens or worse –not using sunscreen at all – thereby, causing more skin damage and potentially increasing skin cancer rates.

### **Conclusion**

No state has taken the drastic action of requiring retail advertisements or displays for FDA approved sunscreen. Since there have been no studies published to date that scientifically prove any sunscreen active ingredient is a hazard to coral reefs, CHPA respectfully requests the Hawaii legislature oppose HB 818. A greater standard of evidence must be considered before such a valuable ingredient to people’s health be targeted for cumbersome signage requirements which may limit its use by individuals needing it most.

Should you have any questions for CHPA, please contact me directly or our local counsel, Ms. Lauren Zirbel at 808-294-9968 or [laurenzirbel@gmail.com](mailto:laurenzirbel@gmail.com).

Respectfully submitted,



Carlos I. Gutiérrez  
Vice President, State & Local Government Affairs  
Consumer Healthcare Products Association  
(202) 429-3521 [cgutierrez@chpa.org](mailto:cgutierrez@chpa.org)

cc: Members, Committee on Ocean, Marine Resources, and Hawaiian Affairs

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<sup>1</sup> Mydlarz et. al., 2010; Aeby et al., 2016.

<sup>2</sup> Fabricius, 2005; Messina and Biggs, 2016.

<sup>3</sup> No, your sunscreen isn't killing the world's coral reefs. <http://mashable.com/2015/11/10/sunscreen-killing-coral-reefs/>.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

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**Sent:** Sunday, February 12, 2017 6:13 PM  
**To:** omhtestimony  
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**Subject:** \*Submitted testimony for HB818 on Feb 14, 2017 08:30AM\*

**HB818**

Submitted on: 2/12/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jason Shon	Individual	Support	No

Comments:

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**HB818**

Submitted on: 2/11/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Leimomi Khan	Individual	Comments Only	No

Comments: Last comments: Why have their been no comments by DLNR or the University of Hawaii on this important issue?

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**HB818**

Submitted on: 2/11/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Leimomi Khan	Individual	Oppose	No

Comments: Additional comments: My apologies, there were two bills introduced on this subject HB 818 and HB 819. HB 819 contained the prohibition of sale of any sunscreen containing oxybenzone; HB 818 only required advertisements or displays. HB 819 died in committee; HB 818 is the bill being heard today. I am hopeful that you will insert the ban that was in HB819 into this bill. Leimomi

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**HB818**

Submitted on: 2/11/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Leimomi Khan	Individual	Oppose	No

Comments: Aloha, I am extremely disappointed that this bill has been amended to remove the ban on sales of sunscreen containing oxybenzone. It appears that priority has again been given to using products that bring in money, rather than the health and safety of our reefs. When they are dead, who will pay to repair for the harm to corals? Perhaps, the folks who make sunscreen should be taxed and monies deposited in an account to be used for cleaning sunscreen from our waters that damage our corals Sounds like a good idea for legislation next year!!!. I favor a complete ban on the sale, offer for sale, or distribution for sale of sunscreen or personal care products containing oxybenzone. The reality is few people will read and heed advertisements or displays, and as it is, researchers have found oxybenzone concentrations in some Hawaiian waters at more than thirty times the level considered safe for corals. The Hawaiian Kumulipo, a Hawaiian Creation chant, tells us that the first organism born was the coral polyp, a very small and simple organism that was the basic building block for life in the seas. Thus, we must protect the coral. Let's place protection of the environment over economic gain. Respectfully, Leimomi Khan. P.S. I will be off-island on the day of the hearing, else, I would present this testimony in person.

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**HB818**

Submitted on: 2/10/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Carl M Jellings Sr	Individual	Support	No

Comments:

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**HB818**

Submitted on: 2/10/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Benton	Individual	Support	No

Comments:

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**COMMITTEE ON OCEAN, MARINE RESOURCES & HAWAIIAN AFFAIRS**

Tuesday, February 14, 2017 at 8:30 AM

(Testimony is 1 page long)

**TESTIMONY IN STRONG SUPPORT OF HB 818**

Aloha Chair Ing, and Members of the Committee:

I am in strong support of HB 818. This measure would require all advertisements or displays for sunscreen containing oxybenzone in the State of Hawai'i to include the following conspicuously displayed statement: "Product contains chemicals which may harm coral reefs."

Many forms of reef-safe sunscreen such as avobenzone, titanium dioxide, zinc oxide and several others are available in the market, and oxybenzone does not provide any better nor more economical protection that other forms of physical or chemical sunblock cannot. In addition to harming reefs, oxybenzone has been shown to be an endocrine disruptor in mammals.

Coral reefs are an essential ecosystem in the ocean, providing habitat for marine life of all kinds. Indeed, coral reefs are called the rainforests of the sea. They are one of Hawai'i's most valuable natural resources, providing fish for seafood, building reefs essential for surfing breaks, and providing the underwater landscape that divers from around the world come to enjoy. Coral reefs are essential to the economic health of the state.

I believe that oxybenzone should ultimately be completely banned from sunscreen products. At minimum, we need to educationally label existing sunscreen products containing harmful oxybenzone at this time.

I urge you to move HB 818 and take this important step forward in protecting Hawai'i's economy and natural resources. I am available to provide any input or assistance on this measure. Mahalo for the opportunity to testify.

Aloha,



Joy Leilei Shih, M.A.S. Marine Biodiversity and Conservation

PhD candidate, Oceanography (marine biogeochemistry)

**gates2 - Thomas**

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**HB818**

Submitted on: 2/13/2017

Testimony for OMH on Feb 14, 2017 08:30AM in Conference Room 312

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Kaily Wakefield	Individual	Support	No

Comments:

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