

SB-3001

Submitted on: 1/28/2022 8:39:25 PM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Klayton Kubo	Individual	Support	No

Comments:

Support. Water Quality is very important. How about Water Quality Studies?

SB-3001

Submitted on: 1/29/2022 7:23:52 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Angela Huntmer	Individual	Support	No

Comments:

Yes. We should be promoting the use of clothing and mineral sunscreens. They of the best and safest protection - for people and ocean life. Mahalo.

SB-3001

Submitted on: 1/30/2022 10:49:56 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Shannon Rudolph	Individual	Support	No

Comments:

Support

January 30, 2022

**Testimony on Senate Bill 3001 Relating to Environmental Protection
SUPPORT**

Committee on Agriculture and Environment
Senator Mike Gabbard, Chair
Senator Clarence Nishihara, Vice Chair

Hearing February 2, 2022 at 1:00pm, Conference Room 224 and videoconference

Dear Honorable Chair Gabbard, Vice Chair Nishihara and Committee Members,

I wholeheartedly support SB3001, which will strengthen the statewide protection of Hawaii's marine environment. Maui County has already taken such measures and I am grateful to see this bill eliminates the pre-emption included in SB2949.

Additionally, SB3001 allows for counties or the state to include ingredients that may be added to the FDA GRASE list (generally recognized as safe and effective). Please keep in mind, that it may not necessarily follow that a sun protection ingredient deemed safe and effective for use as a topical product for humans is automatically safe for our coral reefs, ecosystems and/or marine life. Maui's ordinance allows for these additions, but does not mandate ingredients on the GRASE list be automatically included.

Maui County Code Ordinance 5306 was supported by world reknown molecular biology expert, Dr. Craig Downs, PhD, whose pioneering research first showed the connection between chemical sunscreens and harm to marine life. The CARE Committee also heard testimony in support of our measure from multiple environmental agencies, Mayor Victorino's office, concerned citizens, students, and at least three employees of the State Dept. of Land and Natural Resources who work at Ahihi Kinau, a precious marine preserve in South Maui.

I'd also like to add that this bill is in line with the Edinburgh Declaration, an international commitment to nature-based solutions that was signed at COP26 by BLNR Chair Suzanne Case for the State of Hawaii and myself for the County of Maui!

Please pass SB3001 as is.

Mahalo nui loa,



Kelly Takaya King, Maui County Council
Chair, Climate Action, Resilience and Environment Committee
Member, Local Government Advisory Committee to U.S. EPA
ICLEI Delegate to COP26



Re: Hearing SB 3001
Wednesday, February 2, 2022, 1:00 p.m., by videoconference

Position: **Support SB 3001 with an amendment!**

SUPPORTS SB 3001 and proposes an amendment:

SECTION 1. Section 342D—21, Hawaii Revised Statutes, **is amended** to read as follows:

“342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.

(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or octinoxate, or both. Beginning January 1, 2024, it also shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration, without a prescription issued by a licensed health care provider.

[(b) No county shall enact any ordinance or regulatory restriction to prohibit the sale, use, labeling, packaging, handling, distribution, or advertisement of sunscreens containing oxybenzone or octinoxate, or both, prior to January 1, 2021.] ...”

And to restore, not strikeout, the definitions of oxybenzone and octinoxate.

Aloha Honorable Michael Gabbard, Chair, The Honorable Clarence Nishihara, Vice-Chair, and Members of the Senate Committee on Agriculture and Environment:

On September 24, 2021, **the FDA issued a proposed order concerning nonprescription sunscreen drug products. In the proposed order, two mineral products zinc oxide and titanium dioxide are deemed generally recognized as safe and effective (GRASE), and fourteen products are deemed NOT GRASE.** Of the fourteen products, twelve products do not currently contain sufficient data to support positive GRASE classification. The twelve products that require additional data are avobenzene, cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, oxybenzone, padimate O, and sulisobenzene.

The Environmental Protection Agency, Center for Disease Control, American Cancer Society, World Health Organization, as well as hundreds of scientists and dermatologists, have reported that certain chemical sunscreens are harmful to many forms of life and have not been shown to decrease skin cancer. To protect from the sun and reduce the impact on coral reefs they suggest that people avoid the mid-day sun, wear a protective hat and clothing, and apply sunscreen with only zinc oxide or titanium dioxide as the main ingredient. This is a much better course for public health and the environment than using a petrochemical sunscreen that may cause harm to the coral reefs and other marine life.

We ask your support for SB3001 with an amendment prohibiting the sale, offer for sale, or distribution of non-mineral sunscreens that have questionable effects on the health of humans and marine life in alignment with the Precautionary Principle which asserts that the burden of proof for potentially harmful actions by industry or government rests on the assurance of safety and that when there are threats of serious damage, scientific uncertainty must be resolved in favor of prevention, allowing us to protect our environment and communities for future generations.

Mahalo,
Cynthia Punihaole Kennedy
Director, The Kahalu‘u Bay Education Center

SB-3001

Submitted on: 1/30/2022 1:36:38 PM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ted Bohlen	Testifying for Hawai'i Reef and Ocean Coalition	Support	No

Comments:

To: The Honorable Michael Gabbard, Chair, The Honorable Clarence Nishihara, Vice Chair, and Members of the Senate Committee on Agriculture and Environment

From: Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

Re: Hearing SB3001 RELATING TO SUNSCREEN.

Wednesday February 2, 2022, 1:00 p.m., by videoconference

Position: **Strongly Support SB3001 with amendments!**

The HAWAI'I REEF AND OCEAN COALITION – HIROC – STRONGLY SUPPORTS SB3001 and proposes amendments to continue the existing law banning the sale of sunscreens containing oxybenzone and octinoxate.

HIROC was formed in 2017 by coral reef scientists, educators, local Hawai'i environmental organizations, elected officials, and others to address the crisis facing Hawaii's coral reefs and other marine life. HIROC thanks the Legislature for passing Act 104 in 2018, which provided for **the world's first ban on sale or distribution for sale of sunscreens containing oxybenzone and octinoxate, effective January 1, 2021. That ban should continue, as it is needed to help protect our precious coral reefs and marine life!**

As drafted, this bill would supplant rather than supplement the oxybenzone-octinoxate ban bill that passed in 2018. **This bill should supplement and not supplant the existing law.** Oxybenzone and octinoxate harm reefs and need to be banned from sale in Hawai'i whether or not the FDA eventually finds them to be GRASE for human health.

This bill has a slightly different focus: to protect consumers from petrochemical sunscreens that have not been found to be "generally recognized as safe and effective" (GRASE) by the US Food and Drug Administration (FDA). Consumers should not be exposed to chemicals that have not been demonstrated to be safe, especially where there are scientific studies suggesting these chemicals disrupt hormones and may cause cancers as well as harm corals and other marine life.

It has been argued that banning sunscreens containing petrochemicals from the market would lead to additional skin cancers, because people therefore won't use any sunscreen. This false argument ignores the fact that there are ample safer alternatives available on the market containing the active ingredient minerals zinc oxide or titanium dioxide.

Sunscreen preparations were designed to protect against sunburn; because of this they are assumed to protect against skin cancer, but unfortunately this relationship is inferential only. There are no definitive studies that demonstrate that sunscreens protect against skin cancers, as evidenced by research published by the World Health Organization, US Environmental Protection Agency and some dermatologists.

The argument also ignores what the World Health Organization has called "suntan abuse." Petrochemical sunscreens are often not applied sufficiently or frequently enough, and wash off in water, so may not actually protect as much as people are led to believe. A false sense of protection against both UVB and UVA pathologies may cause people to spend more time in the sun. This additional exposure to the sun, or "suntan abuse," increases the risk of melanoma and may cause MORE skin cancers.

The best course is to avoid the mid-day sun, but if you will be in the sun, wear a protective hat and clothing and sunscreens with zinc oxide or titanium dioxide. This is much better course for public health and the environment than using a petrochemical sunscreen that gets absorbed into your bloodstream and may disrupt your hormones, potentially causing cancers, and may wash off and harm coral reefs and other marine life.

With these amendments proposed by HIROC, the bill beginning would read:

SECTION 1. Section 342D—21, Hawaii Revised Statutes, is amended to read as follows:

"342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.

(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or octinoxate, or both. Beginning January 1, 2023, it also shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration, without a prescription issued by a licensed health care provider."

The definitions of oxybenzone and octinoxate stricken in the bill from the existing law (page 2, line 6 through page 3, line 5) also should be restored.

Mahalo for the opportunity to testify in **STRONG SUPPORT for SB3001 with proposed amendments!**

Hawai'i Reef and Ocean Coalition (by Ted Bohlen)



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P: 808-533-1292 | e: info@hawaiiifood.com

Executive Officers

Charlie Gustafson, Tamura Super Market, *Chair*
Eddie Asato, Pint Size Hawaii, *Vice Chair*
Gary Okimoto, Safeway, *Secretary/Treas.*
Lauren Zirbel, HFIA, *Executive Director*
John Schliff, Rainbow Sales and Marketing, *Advisor*
Stan Brown, Acosta Sales & Marketing, *Advisor*
Paul Kosasa, ABC Stores, *Advisor*
Derek Kurisu, KTA Superstores, *Advisor*
Toby Taniguchi, KTA Superstores, *Advisor*
Joe Carter, Coca-Cola Bottling of Hawaii, *Immediate Past Chair*

TO: Committee on Agriculture and Environment
Senator Mike Gabbard, Chair
Senator Clarence K. Nishihara, Vice Chair

FROM: HAWAII FOOD INDUSTRY ASSOCIATION
Lauren Zirbel, Executive Director

DATE: February 2, 2022
TIME: 1pm
PLACE: Via Videoconference

RE: SB3001 Relating to Sunscreen

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.

The HFIA proposes that since this bill would ban many products that are used to prevent skin cancer, a strong justification should be provided for this measure and high standard of review should be conducted. The FDA is continuing to gather information about a range of sunscreen ingredients, and per their website, “Given the recognized public health benefits of sunscreen use, Americans should continue to use broad spectrum sunscreen with SPF 15 or higher with other sun protective measures as this important rulemaking effort moves forward.”¹

This measure will hurt local retailers by encouraging consumers to buy their favorite sunscreens online, where it is unlikely this law will be enforceable. The promotion of this bill will adversely impact human health, serving only to demonize wearing sunscreen, and increase people’s risk of skin cancer.

Our local businesses care about offering products individuals feel comfortable with and which are affordable for use on a daily basis to prevent skin cancer. Many products that have sun protection factor, such as lotions, tinted moisturizers, and anti-aging products are intended for daily use in small amounts. Many or all of these products would be unnecessarily banned

1
<https://www.fda.gov/media/124654/download#:~:text=Sunscreens%20active%20ingredient%20safety%20and%20effectiveness&text=FDA%20proposes%20that%20it%20needs,sulisobenzene%2C%20oxybenzone%2C%20avobenzone>

under this bill, as would other federally approved and regulated healthcare products. Having access to these products is especially important here in Hawaii where the rate of skin cancers, including deadly melanoma, is significantly higher than on the mainland.²

Given that this ban would deprive people of products they use to prevent possibly life-threatening skin cancers, we ask that this measure be held. Thank you for the opportunity to testify.

² <http://www.staradvertiser.com/2018/02/28/editorial/island-voices/healthy-people-healthy-places-include-sunscreen/>

SB-3001

Submitted on: 1/31/2022 8:57:56 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Robert Culbertson	Individual	Support	No

Comments:

Aloha Senators!

As a frequenter of our precious and sometimes even pristine beaches I am keely aware of the pollutants that often show up from folks who are 'sold' the kinds of sunscreen lotions we now know to be harmful to marine organisms.

Please pass this bill with appropriate amendments that address the particular chemicals that we know and as a matter of exercising the 'precautionary principle', should be prohibited for the welfare of aquatic life.

Mahalo nui loa,

R A Culbertson

Honokaa



*Dedicated to the conservation of coastal and marine environments,
emphasizing stewardship of the natural resources of Hanauma Bay*

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and
Members of the Committee on Agriculture and Environment

Date: Wednesday, February 2, 2022

Time: 1:00 PM

Place: Conference Room 224 & Via Videoconference

Re: **STRONG SUPPORT FOR SB3001 WITH AMENDMENTS TO SUPPLEMENT,
NOT SUPPLANT, EXISTING LAW**

Aloha Chair Gabbard, Vice Chair Nishihara, and Committee Members,

Friends of Hanauma Bay thanks the Legislature for passing Act 104, 2018 which led the world in banning the sale and distribution of sunscreens containing the petrochemical UV filters oxybenzone and octinoxate effective January 1, 2021. This landmark ban should remain in effect to help protect our fragile coral reefs and other marine wildlife.

As drafted, SB3001 would supplant rather than supplement the oxybenzone-octinoxate ban bill that passed in 2018. **This bill should supplement and not supplant the existing law.** Oxybenzone and octinoxate harm reefs and need to be banned from sale in Hawai'i whether or not the FDA eventually finds them to be GRASE for human health.

SB3001 has a slightly different protection focus: it aims to protect consumers from petrochemical sunscreens that have not been found to be "generally recognized as safe and effective" (GRASE) by the US Food and Drug Administration (FDA). Consumers should not be exposed to chemicals that have not been demonstrated to be safe, especially where there are scientific studies suggesting these chemicals disrupt hormones and may cause cancers as well as harm corals and other marine life.

It has been argued that banning sunscreens containing petrochemicals from the market would lead to additional skin cancers, because people therefore won't use any sunscreen. This false argument ignores the fact that there are ample safer alternatives available on the market containing the active ingredient



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emphasizing stewardship of the natural resources of Hanauma Bay*

minerals zinc oxide or titanium dioxide, which the FDA finds to be GRASE in their September 2021 proposed final order on sunscreens.

Sunscreen preparations were designed to protect against sunburn. However, there are no definitive studies demonstrating that sunscreens protect against skin cancers, as evidenced by numerous research published by the World Health Organization, US Environmental Protection Agency and some dermatologists.

The argument also ignores what the World Health Organization has called “suntan abuse.” Petrochemical sunscreens are often not applied sufficiently or frequently enough, and wash off in water, so may not actually protect as much as people are led to believe. A false sense of protection against both UVB and UVA pathologies may cause people to spend more time in the sun. This additional exposure to the sun, or “suntan abuse,” increases the risk of melanoma and may cause MORE skin cancers.

The best course is to avoid the mid-day sun, but if you will be in the sun, wear a protective hat and clothing and sunscreens with zinc oxide or titanium dioxide. This is much better course for public health and the environment than using a petrochemical sunscreen that gets absorbed into your bloodstream and may disrupt your hormones, potentially causing cancers, and may wash off and harm coral reefs and other marine life.

We join the Hawaii Reef and Ocean Coalition in recommending the following amendments to ensure SB3001 supplements, NOT SUPPLANTS, ACT 104, 2018:

SECTION 1. Section 342D—21, Hawaii Revised Statutes, is amended to read as follows:

“342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.

(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or



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emphasizing stewardship of the natural resources of Hanauma Bay*

octinoxate, or both. Beginning January 1, 2023, it also shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration, without a prescription issued by a licensed health care provider."

The definitions of oxybenzone and octinoxate stricken in the bill from the existing law (page 2, line 6 through page 3, line 5) also should be restored.

Mahalo for the opportunity to testify in **STRONG SUPPORT for SB3001 with proposed amendments to supplement but not supplant Act 104, 2018.**

With Aloha,

Lisa Bishop
President

2/1/2022

TO:

Senator Mike Gabbard, Chair
Senator Clarence Nishihara, Vice Chair

Members of the Senate Committee Agriculture and Environment
Thirty-First Legislature
Regular Session of 2022

FROM:

The members of the Hawaii Skin Cancer Coalition

RE: OPPOSITION to Senate Bill 3001, – RELATING TO SUNSCREENS
Hearing Date – Wednesday, February 2, 2022

Dear Chair Gabbard, Vice Chair Nishihara, and Members of the Committee,
the members of the Hawaii Skin Cancer Coalition strongly oppose SB 3001.

The Hawaii state law signed in July 2018 eliminated the OTC sale of the ingredients oxybenzone and octinoxate. SB 3001 would expand this ban to include the most utilized alternative sunscreen ingredients and could potentially remove approximately 64% of the sunscreens currently available in the United States from being sold in Hawaii.

The proposed legislation could significantly reduce consumer choice of and access to sunscreen in Hawaii, where sunscreen is often used not only in the ocean, but whenever people are outdoors doing activities such as hiking, golfing, walking, running, cycling or working outside. This puts Hawaii residents at greater risk for skin cancer with limited peer-reviewed scientific evidence on sunscreen ingredients and its impact on environmental and human health.

Morbidity and deaths from skin cancers are on the rise in the U.S. and Hawaii. The current focus of Hawaii's legislative policy limiting the sale of sunscreen products will undermine years of progress towards addressing the effects of unprotected sun exposure, a primary risk factor for skin cancer. The leading scientific agencies in the U.S., all emphasize that using sunscreens is a critical part of regimens to prevent skin cancers, along with protective clothing, hats with brims, and shade. In open water, hats and shade are not options.

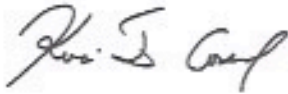
According to the National Cancer Institute, nearly 5 million people in the US and at the cost of over 8 billion dollars to our U.S. health care system. In Hawaii, ~7,000 people are treated for skin cancers each year. Melanoma, the deadliest form of skin cancer, is now the second most common form of cancer for females aged 15-29 years old. Each year more than 10,000 people die of melanoma across the U.S. In Hawaii, 400 people are diagnosed, and ~50 people die each year. It is essential that we conduct valid

The Hawaii Skin Cancer Coalition's mission is to provide clear, concise messages on skin cancer prevention, early detection, and effective treatment for both the public and health professionals based upon current and accurate information. The Coalition is a collaborative effort between concerned local organizations and businesses including, the University of Hawai'i Cancer Center, American Cancer Society, Hawai'i Pathologists' Laboratory, the Friends of the University of Hawai'i Cancer Center, the Hawai'i Dermatological Society, Kaiser Permanente, the Hawai'i Lifeguard Association, Queen's Healthcare Plan, the University of Hawai'i Dermatology Interest Group Students and the Hawai'i Ophthalmological Society. All of these organizations share a common goal to help prevent skin cancer.

research to understand the potential environmental effects of sunscreen use better to protect Hawaii's natural resources.

Mahalo for the opportunity to submit testimony in strong OPPOSITION to Senate Bill 3001, (SB 3001) on behalf of the Hawaii Skin Cancer Coalition.

Sincerely,



Kevin D. Cassel, DrPH

President, Hawaii Skin Cancer Coalition

The Hawaii Skin Cancer Coalition's mission is to provide clear, concise messages on skin cancer prevention, early detection, and effective treatment for both the public and health professionals based upon current and accurate information. The Coalition is a collaborative effort between concerned local organizations and businesses including, the University of Hawai'i Cancer Center, American Cancer Society, Hawai'i Pathologists' Laboratory, the Friends of the University of Hawai'i Cancer Center, the Hawai'i Dermatological Society, Kaiser Permanente, the Hawai'i Lifeguard Association, Queen's Healthcare Plan, the University of Hawai'i Dermatology Interest Group Students and the Hawai'i Ophthalmological Society. All of these organizations share a common goal to help prevent skin cancer.



**TESTIMONY OF TINA YAMAKI, PRESIDENT
RETAIL MERCHANTS OF HAWAII
February 2, 2022
SB 3001 Relating to Sunscreen**

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

The Retail Merchants of Hawaii was founded in 1901, RMH is a statewide, not for profit trade organization committed to the growth and development of the retail industry in Hawaii. Our membership includes small mom & pop stores, large box stores, resellers, luxury retail, department stores, shopping malls, local, national, and international retailers, chains, and everyone in between.

We are opposed SB 3001 Relating to Sunscreen. Beginning January 1, 2023, this bill prohibits the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration, without a prescription issued by a licensed health care provider.

This measure would go beyond the already current state law banning sunscreens with oxybenzone, octinoxate.

Hawaii is known for its many sunny days and many residents and visitors who uses sunscreen include little leaguers, hikers, golfers, soccer and baseball players, and joggers to name a few. With the pandemic we are seeking more people and families enjoying outdoor sports biking, playing outside, and going to the park. Sunscreen is not just used for beach and other water activity purposes. **Sunscreen also comes in many forms that include foundation makeup, face moisturizers, eye creams, hair care products, after shave balm, eyeshadows, setting powders, lipsticks, lip balm, hand creams, body lotions, insect repellent and more.** If this measure passes, we will continue to see many of these types of beauty products stop being sold in our local stores and instead customers will purchase them online with companies who have no ties to Hawaii.

Many of us do NOT go to the beach but wear sunscreen daily to protect ourselves from the effects of the sun like skin cancer - the most common form of cancer. Every year there are more cases of skin cancer in the United States than incidences of breast cancer, prostate cancer, lung cancer, and colon cancer 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. Most melanomas are caused by the sun, and **a person's risk of melanoma doubles if he or she has had more than five sunburns.**

We may also run the risk of people no longer wearing sunscreen and thus increasing their chances of skin cancer. This ban would also penalize those who do not go to the beach but use sunscreen on a regular basis like hikers, golfers, tennis players and joggers to name a few. Sunscreen products should be affordable and accessible first line of defense for individuals seeking protection from the sun's cancer-causing UV rays. Banning the sale of these products will drastically reduce the selection of sunscreen products available in Hawaii as well as compel local residents to purchase products online or not use sunscreen at all and our visitors to bring their own in their suitcases. **How many will actually take time off from work, pay a co-payment to see a doctor and then wait in the pharmacy to a get a prescription for suntan lotion? Not to mention having to pay for the expensive sunscreen because insurance may not cover it.**

We also would like to point out that the Food and Drug Administration (FDA) considers sunscreens to be a nonprescription drug. The FDA has issued a proposed order NOT A FINAL ORDER, which data is being gathered to fill the identified safety gaps. These sunscreen ingredients have been used for years.

For these reasons, we respectfully urge you to hold this bill.

Mahalo again for this opportunity to testify.



2/1/2022

AEN Committee
Hawaii State Capitol
Honolulu, Hawaii 96813

Dear Chair Gabbard, Chair, Vice Chair Nishihara, and Members of the Senate Committee on Agriculture and Environment,

Position: Strongly support SB3001 with amendments that the existing oxybenzone/octinoxate ban law must be supplemented not supplanted.

The Surfrider Foundation is a national nonprofit organization dedicated to the protection and enjoyment of our ocean, waves, and beaches. Surfrider maintains a network of over 150 chapters and academic clubs nationwide, including 4 chapters in the Hawaiian Islands. The Surfrider Foundation focuses on many aspects of the environment such as coastal protection, plastic pollution, and water quality.

Already in this state we have banned the chemicals oxybenzone and octinoxate from legal sale in sunscreens. This is a huge step in protecting not only our coral reef areas but also the people who use these products, as they are shown to be harmful to both (Downs et al. 2016, DiNardo and Downs 2017, and Siller et al. 2018). These chemicals are among those that are readily absorbed into the skin (Matta et al. 2019) and have shown toxic hormonal effects in some vertebrates (Zhang et al. 2016).

With the amendment that ensures SB3001 will supplement and not supplant the existing oxybenzone/octinoxate ban law, SB3001 will strengthen the statewide protection of Hawaii's marine environment.

The Surfrider Foundation works with many companies already striving to make a suitable alternative, and there are many zinc based sunscreens on the market that are hugely popular and easily accessible. Making these the norm would help drive down costs as well, further increasing accessibility to lower income sectors of Hawaii. And from personal experience, they just feel better on your skin.

Thank you for your consideration of this testimony in support of SB3001 with amendments, submitted on the behalf of the Surfrider Foundation's 4 Chapters in Hawaii and all of our members who live in the state and visit to enjoy the many coastal recreational opportunities offered by all of the islands' coastlines.

Sincerely,

Lauren Blickley
Hawaii Regional Manager
Surfrider Foundation

SB-3001

Submitted on: 2/1/2022 12:22:41 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

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

Comments:

I strongly support SB3001, which will strengthen the statewide protection of Hawaii's marine environment. Please pass this important legislation!

In Strong Support of SB3001 (AEN Public Hearing February 2, 2022)

Joe DiNardo – Toxicologist

The following comments are based on my experience with product development, regulatory compliance as well as pre-clinical and clinical toxicology testing with some environmental testing of OTC sunscreen actives and formulations dating back to 1976.

Dear Senators Gabbard, Nishihara, Acasio, Rhoads and Fevella,

In STRONGLY SUPPORT of SB3001 which “Prohibits the sale and distribution of sunscreen products containing ingredients not generally recognized as safe and effective as defined by the Food and Drug Administration (FDA)” **with an amendment to continue the existing law banning the sale of sunscreens containing oxybenzone and octinoxate and the addition of other Non-GRASE actives.**

I strongly support SB3001

After review of hundreds of scientific papers currently in the literature as well as authoring/co-authoring 11 publications on the topic of sunscreen toxicity, the toxicological impact of organic sunscreen actives (which are currently being removed from the FDA’s GRASE list – see below) is clear. These substances are not only reported to cause irritant/allergic contact dermatitis in humans, but have been associated with numerous types of toxicological adverse reactions including reproductive and carcinogenic effects in humans as well as in aquatic and terrestrial species.

Additionally, it is important to note that the current US Food, Drug and Cosmetic Law states that it is industry’s responsibility to demonstrate that these chemicals/products are “safe and effective for human use” and it is not the responsibility of citizen’s or the government to demonstrate these concerns. To date it is unclear if industry has conducted or is even thinking of conducting such studies; in fact, the only thing that industry has appeared to do is disagree with the data and successfully lobby congress to fund the Environmental Protection Agency (EPA) to fund the National Academy of Sciences (NAS) to review the available data with a panel consisting of mainly industry supporters. FDA is responsible for Human Health & Safety and NOAA is responsible for U.S. National Marine Sanctuaries; the EPA and/or NAS have no jurisdiction directly related to sunscreen regulations for humans or environmental impact to protected coral reefs.

FDA’s Official View:

As published by FDA in the February 26, 2019 Federal Register

<https://www.govinfo.gov/content/pkg/FR-2019-02-26/pdf/2019-03019.pdf>: *Because the public record does not currently contain sufficient data to support positive GRASE determinations for cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, padimate O, sulisobenzene, oxybenzone, or avobenzone, we are proposing that these ingredients are Category III. For example, the available literature includes studies indicating that oxybenzone is absorbed through the skin to a greater extent than previously understood and can lead to significant systemic exposure, as well as data showing the presence of oxybenzone in human breast milk, amniotic fluid, urine, and blood plasma. The significant systemic availability of oxybenzone, coupled with a lack of data evaluating the full extent of its absorption potential, is a concern, among other reasons, because of questions raised in the published literature regarding the potential for endocrine activity in connection with systemic oxybenzone exposure. Nearly all of these sunscreen active ingredients also have limited or no data characterizing their absorption.*

Additionally, FDA published a “Fact Sheet” outlining the specific concerns/changes needed for industry compliance (<https://www.fda.gov/media/124655/download>): On February 21, 2019, FDA issued a proposed rule describing the conditions under which FDA proposes that OTC sunscreen monograph products are generally recognized as safe and effective (GRASE) and not misbranded.

This action is an important example of FDA’s ongoing efforts to ensure that sunscreens are safe and effective for regular, life-long use. The agency anticipates these changes will improve the quality, safety, and efficacy of sunscreens Americans use every day. FDA will continue to work with industry and public health stakeholders to make sure that consumers have access to safe and effective sunscreens.

1. Proposed GRASE Status of Active Ingredients Listed in the Stayed 1999 Final Monograph
 FDA has proposed the following categories for the 16 sunscreen monograph ingredients.

GRASE* for use in sunscreens	Not GRASE** for use in sunscreens	***Insufficient data for use in sunscreens
Zinc oxide and titanium dioxide	Aminobenzoic acid (PABA) and trolamine salicylate	Cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, padimate O, sulisobenzone, oxybenzone, avobenzone

*GRASE= Generally Recognized as Safe and Effective **These ingredients are not currently marketed. ***For those ingredients in the “insufficient data” category, FDA proposes that it needs additional data to determine that sunscreens with these ingredients would be GRASE.

National Oceanic and Atmospheric Administration (NOAA) Official View -
<https://oceanservice.noaa.gov/news/sunscreen-corals.html>: Common chemicals used in thousands of products to protect against harmful effects of ultraviolet light threaten corals and other marine life.

SUNSCREEN CHEMICALS AND MARINE LIFE
 How sunscreen chemicals enter our environment:

- The sunscreen you apply may not stay on your skin.
- When we swim or shower, sunscreen may wash off and enter our waterways.

How sunscreen chemicals can affect marine life:

- GREEN ALGAE:** Can impair growth and photosynthesis.
- CORAL:** Accumulates in tissues. Can induce bleaching, damage DNA, deform young and even kill.
- MUSSELS:** Can induce defects in young.
- SEA URCHINS:** Can damage immune and reproductive systems, and deform young.
- FISH:** Can decrease fertility and reproduction, and cause female characteristics in male fish.
- DOLPHINS:** Can accumulate in tissues and be transferred to young.

Chemicals in some sunscreens that can harm marine life:

- 3-Benzylidene camphor
- 4-Methylbenzylidene camphor
- Octocrylene
- Benzophenone-1
- Benzophenone-8
- OD-PABA
- nano-Titanium dioxide
- nano-Zinc oxide
- Octinoxate
- Oxybenzone

Here are a few ways to protect ourselves and marine life:
 Consider sunscreen without chemicals that can harm marine life, seek shade between 10 am & 2 pm, and use Ultraviolet Protection Factor (UPF) sunwear.

Seek shade, Umbrella, Sun hat, Sunscreen, UV Sun glasses, Sun shirt, Leggings

Revised Sep. 2020 | oceanservice.noaa.gov/sunscreen

Mahalo for your efforts to protect your citizens, the environment and the reefs!

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Date: Wednesday, February 2, 2022

Time: 1:00 PM

Place: Conference Room 224 & Via Videoconference

Re: **STRONG SUPPORT FOR SB3001 WITH AMENDMENTS TO SUPPLEMENT, NOT SUPPLANT, EXISTING LAW**

Aloha Chair Gabbard, Vice Chair Nishihara, and Committee Members,

I am a 7th grade Science Teacher at Kīhei Charter School on Maui, Hawai‘i. In this testimony you will find letters from my passionate and dedicated students in strong support of SB3001.

As a 7th grade cohort we have been researching the public’s understanding and awareness of the non-regulated terms, reef-safe and reef-friendly and investigating the accessibility of reef-safe sunscreen products available to consumers in Maui.

Through our research we found that the use of non-regulated labels, Reef Friendly, Reef Safe, and Reef Conscious are a point of confusion for consumers. We identified many sunscreens containing chemical ingredients labeled reef-friendly and reef-conscious. All sunscreen products surveyed by students met Hawai‘i’s 2021 legislative standards; however, just 82, out of the 210 sunscreen products surveyed, are reef safe / mineral-based.

The Food and Drug Administration considers the only active ingredients in sunscreen to be safe and effective are zinc oxide and titanium dioxide, two of the main ingredients in mineral-based sunscreen. Laboratory trials found that zinc oxide and titanium dioxide do not cause coral bleaching or toxicity (Adler, et al., 2020). However, environmental scientists and health experts are concerned about chemicals like avobenzone, octocrylene, homosalate, and octisalate that are often used to substitute oxybenzone and octinoxate. Danovaro et al. (2008) found that sunscreens containing these ingredients cause the rapid and complete bleaching of hard corals, even at extremely low concentrations. Research demonstrates that octocrylene can disrupt human hormones and have toxic impacts on the brain and reproductive health of a variety of aquatic organisms. Downs et al., (2021) show that octocrylene bioaccumulates in fish species and degrades into benzophenone, a powerful carcinogen, reproductive disruptor, and herbicide. Avobenzone is also an endocrine disruptor and can reduce coral resilience against the high ocean temperatures that are threatening corals worldwide due to global warming (Downs, 2021).

This research has led my students and myself to be in are in strong support of banning the sale and distribution of chemical-based sunscreen.

Mahalo nui loa,

Jadda M. Miller
Science Educator and Researcher

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Gershon and I live on the island of Maui. I am 13 years old and I go to school at Kihei Charter School. I believe that if we do something about chemical-based sunscreen we could be saving a lot of coral and sea life. We could start banning these harmful chemicals in the sunscreens and if we do this it will benefit the ocean and people of Hawaii. There are so many coral reefs dying and so much ocean life dying-- if we keep this up we won't have anymore fish to eat. If we ban these harmful chemicals and these harmful sunscreens, we can avoid all of this and Hawaii can become more beautiful; there will be more coral and fish. I hope you will pass this Bill and help our beautiful islands become a thriving and sustainable community.

Sincerely,

Gershon Portillo
7th Grade
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Vienna Phillips and I'm a 7th grade student at Kihei Charter School. I am writing this letter to support SB3001. We need to get rid of all chemical-based sunscreen. I support this Bill because I know chemical-based sunscreen is killing reef ecosystems. We need to stop this problem because if we don't our reefs could disappear forever. We cannot sit back and wait for this problem to go away we need to do something now. Our reefs are dying because of us so we should be the ones helping them to stay alive. We are banning these sunscreens because there are chemicals in them killing the reef and we need to stop it. I am writing this with experience because I have seen how our reefs are dying. I go snorkeling with my dad and I see reefs that are dying and the fish have nowhere to go. I am writing this to support SB3001 and take this into action in 2023.

Sincerely,

Vienna Phillips
7th Grade, Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I am writing to you today to express my support for S.B. 3001. My classmates and I have been learning about the effects and threats from this problem. I believe that if we have the ability and opportunity to protect coral reefs, we should. Consumers sometimes don't know about the effects of non-reef safe sunscreen. Because of this, little attention has been given to the effects of sunscreen; over 70% of coral from the entire world has been bleached. When people snorkel, they mostly go places with amazing coral and beautiful colors but over time the coral gets bleached and loses all of the colors and fish. Losing the profit from tourists and killing of the ocean. If we banned these chemicals, the ocean would be safer and people and ocean ecosystems would be healthier. The amazing coral reefs would last and continue to draw the attention of people. There are numerous problems in the world, if we have the ability to help, why shouldn't we?

Sincerely,
Luz Arnal
7th-Grade, Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen
Position: Strong Support

This letter is to encourage you all to sign SB3001 into law and to express my support for this Bill. My name is Jia Angel and I go to Kihei Charter School. I currently live on the island of Maui and am 13 years old. Up until recently I used to see the so-called “reef-friendly” and non-reef safe sunscreen all over the place and still do. It bothers me that many people are using these chemical-based sunscreens and it seemed like they didn’t even realize it. Of course, I was the same way at one point until someone told me the awful truth about it. What I am saying is that we need to stop these sunscreen companies from selling these harmful products across the State. While there is already a ban on sunscreens with the chemicals Oxybenzone and Octinoxate in Maui County there is still a whole list of chemicals that are still being used in the production of sunscreen that harm our coral reefs, fish, ocean, and us. These companies use the slogan of “reef-friendly” to convince people that their products are safe to use. To be blunt, it’s not. Just because a product claims it is “reef-friendly” does not mean that it is safe for the reef. I personally support Bill 3001 because I no longer want to see all these chemical-based sunscreens on the shelves of our stores. Think about it, the reef is made up of living creatures, if it can harm them, then I’m pretty sure it can harm us just as well.

Sincerely,

Jia Angel
Kihei Charter School
7th-Grade Student

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen
Position: Strong Support

Hello. My name is Ciro Martin, and I'm a 7th grade student from Kihei Charter School. I think what you guys are doing is incredible, and will really help out Hawaii and the people that live/visit here. I've been living here for 6 years now, and I love going in the water. I especially love surfing. Only recently, I have started to understand the impacts of chemical-based sunscreen on coral reef ecosystems.

It's not only me, there are a lot of people who love the ocean, and have been connected to the ocean for a long time. To some people even, the reef and ocean is all they have. If the reefs disappear in the next 20 years, it will affect what people will do and the food they eat. A lot of people eat fish for instance. This isn't only for people, fish are also an integral part of a healthy ocean ecosystem. A lot of wildlife in the ocean depend on coral reefs, both for food, and shelter, and if we keep doing the same thing that we are doing right now, not making a difference, all the wildlife in the ocean will probably end up going extinct.

This will happen IF, we keep doing the same thing, but what you guys are doing, is an opportunity to switch. By banning these chemical sunscreen ingredients, not only will you be giving out a message to visitors, and make them understand the effects of "reef-friendly" sunscreen, but you will also be giving the people that live here and the wildlife in the ocean a better future. Please do the right thing.

Sincerely,

Ciro Martin
7th-Grade Science Class
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Hannah Wick. I live on the island of Maui. I am 12 years old and I go to school at Kihei Charter School.

I think that Bill 3001 should be passed because The Hawaiian islands were not rightfully inhabited by Americans in the first place. The Hawaiian islands were rightfully inhabited by Hawaiian people thousands of years ago, and they were flourishing. The islands were healthy and so were the reefs. However, when Americans came along, we stole the islands from them, and now we are destroying them. Not only have Americans stolen the Hawaiian islands from the rightful owners, but now we are severely damaging them. The fish and coral reefs are dying because of us. We are responsible for all the negative effects that have been showing up all over Hawaii's reefs. Not only do we need to stop using non reef safe sunscreen, we also need to take even more precautions to help protect the Hawaiian islands, and show the least bit of respect for our beautiful Ohana. If we are going to continue to live in this beautiful place, we need to make major changes, including passing SB3001. Since we have taken over these beautiful islands from its original settlers, the least we can do is treat these islands with respect and help protect them, and how we can do that is by passing SB3001.

Sincerely,

Hannah Wick
7th-Grade Science
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I support SB3001 because it will help us as kids, the future of our earth to be able to see and live with the coral reefs and marine life now, when we are your age. My mom moved here twenty years ago and the places where she went snorkeling then, are gone now. I hate seeing bleached coral reefs when I go snorkeling because of these sunscreens. I feel helpless when I see turtles that have been tangled in fishing line at the MOC Marine Institute –where I volunteer– but I feel devastated when I see or hear of turtles that have died because of the chemicals in sunscreens. This bill could change that, so this is why I want non reef safe sunscreen to be banned.

Sincerely,

Annalise Eller
7th Grade Science
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen
Position: Strong Support

My name is Lili'u Kaahumanu. I live on the island of Maui. I am 13 years old and I go to school at Kihei Charter School.

Our Earth; the reason for our breath. It's been here since the beginning of time and now is furtherly being developed into a modern, technologically advanced planet. Though, currently, the planet is being negatively impacted by the chemical-based sunscreens being sold to customers. Bill 3001 is committing an act that should be considered to be unlawful to sell, offer to sell, or try to distribute for sale in the State that contains ingredients that aren't recognized as safe and effective by the United States Food and Drug Administration without having a prescription that's issued by a licensed healthcare provider. The significance of banning the usage of non-reef-safe sunscreen is really important because of the effects of what will happen if the ban on non-mineral sunscreen is not put into effect.

An experience I had that showed what's happening if communities and the law don't ban these sunscreen products is when I was snorkeling with the Kihei Charter ECO Club that I am in. As we swam in the sea, we saw many coral reefs beneath us. Though, all of them were white and unhealthy. The color and the life of the coral were no longer there. The negative impact on the corals from the chemicals in most sunscreen products will destroy the land we live on. Time flies by fast, and in my opinion, communities should take action now.

Without healthy coral reefs, those reefs won't be able to protect coastlines from erosion and flooding. They do that by absorbing the wave energy as they come in contact with and move across the physical structure of the reefs. Having healthy reefs can provide protection, even through strong storms and strong wave conditions. As long as tourists and locals continue to use non-reef-safe sunscreen, the more impactful it can be for people who have jobs, for the economy, for the environment, for future generations, and for our own future. We can make a difference if we find ways to protect our land and our coral reefs. Taking action on SB3001 will be greatly beneficial to everyone on the planet if you put this into consideration.

Mahalo, for your time and consideration.

Sincerely,

Lili'u Kaahumanu
7th-Grade Science Student
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Nicole Critchlow. I live on the island of Maui. I am 13 years old and I go to school at Kihei Charter School.

People don't realize how bad the effects of non-reef safe sunscreen is. Up to 6,000 tons of sunscreen are estimated to wash into coral reefs around the globe each year. Most of that is full of Homosalate and Parabens, which aren't only bad for the environment, but also bad for you, with inhaling non reef sunscreen is even worse than it seeping into your skin. In fact, says Craig A. Downs, Ph.D., executive director of the nonprofit Haereticus Environmental Laboratory, though oxybenzone and octinoxate are the most widely studied, there are several other chemicals used in sunscreens and other personal care products that research suggests might be an environmental threat. This is why I fully support SB3001.

Sincerely,

Nicole Critchlow
7th Grade, Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Justin Pe Benito. I live on the island of Maui. I am 13 years old and I go to school at Kihei Charter School.

It should be unlawful to sell non-reef safe sunscreen because the ingredients in chemical sunscreen is not safe and effective like mineral based sunscreen. We should ban all sunscreens that have been shown to cause negative effects to our reefs in order to save our marine ecosystems from disappearing. These sunscreens can also cause disease and birth effects so if we accept this we can save the people of the Hawaiian community from harm.

Thank you for your time and consideration.

Sincerely,

Justin Pe Benito
7th grade
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I am in support of SB3001 because it will save coral reefs in a big way. The main way these reefs are being destroyed is because big companies and stores are selling non-reef-safe sunscreen. If you pass this Bill it will allow visitors and locals to protect themselves and the coral reefs. The banning of these unnecessary sunscreens will eliminate the main ways these reefs are decreasing in size and quantity. This long-term issue will affect Hawaii negatively if we don't change. As a result, climate change will become a much greater issue especially to Hawaii. This is why This SB3001 should be passed.

Thank you for your time and consideration.

Jacob James
7th Grade
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Noa Fleming. I live on the island of Maui. I am 13 years old and I go to school at Kihei Charter School. After all the research and work that has been done to prove the bad effects that chemical-based sunscreen has on the reef it makes me sad to know that these harmful sunscreens are still being sold in stores.

I want to share why I feel SB3001 should be passed. First of all, the reefs of Hawaii have huge cultural significance and have been a part of what makes Hawaii so magical. Not only are the reefs important to us but they are also needed by many fish for food and shelter and without them most of these fish will die. All this would tremendously impact Hawaii in many ways but with your help we could stop it before it's too late. SB3001 is the solution. Please pass the bill for Hawaii's coral reefs, and future generations.

Sincerely,

Noa Fleming
Kihei Charter School
7th-Grade Science Student

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I am writing to you to express my support of the SB3001. I am in the water a lot and I really enjoy having clean water surf, swim, and dive in. But more than this, I want the ocean ecosystem to be clean for the organisms that call it home. I want the ocean and reefs in Hawaii to be pristine. I want the water to be healthy and beautiful for my kids and future generations to play in and learn from. I know I am just a kid but I am a kid who cares a whole lot about Hawaii and want to call this place my home for the rest of my life. People say, that we protect what we love. I love Hawaii and this is my plea to protect her. If SB3001 gets passed, it will follow with cleaner water and livelier reefs which is what I want.

Thank you for your time and help.

Sincerely,

Jayden Craig
7th Grade Science Student
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I support SB3001 because I am always in the ocean and we need to keep our oceans safe. Prohibiting the sale of chemical-base sunscreen is great steps towards keeping our reefs healthy. This bill will help everyone who enjoys the ocean and all marine life. If we continue to use chemical-based sunscreen, when I have kids there may not be a reef to surf, observe while diving, or fish from. That is a future that scares me as a 12-year-old kid.

I appreciate your hard work and time. Thank you for your consideration.

Sincerely,

Kingston Panebianco
Kihei Charter School, 7th-Grade

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Hana Freet. I live on the island of Maui. I am 12 years old and I go to school at Kihei Charter School. I am writing to you today to express my support for SB3001. I believe that this bill will help not only our coral reefs, but everything around us. The chemicals that are not generally recognized as safe and effective by the FDA are in over 3,500 products today, and the products with these chemicals in them are mostly from big manufacturers that are known all across the U.S. At 'Āhihi Bay, these chemicals have been found at 14 times the "safe" levels for coral to survive. If this bill is not passed, then that number will keep going up not only at 'Āhihi Bay, but all around the Hawaiian Islands. If this bill is passed, then the smaller companies that are selling mineral based sunscreen products, will get better sales than they had before and our coral reefs will have a better chance of survival. When these chemicals are put into the water, they are killing the coral and stopping the coral's ability to reproduce. Not only when you apply sunscreen at the beach, but when you spray sunscreen anywhere on the islands, it will eventually come off and end up in the ocean from runoffs, rivers, and drains. Again, I'd like to restate my support for SB3001 regarding the unlawful sell, offer for sale, or distribute for sale in the state any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration, without a prescription issued by a licensed health care provider.

Sincerely,

Hana Freet

7th Grade

Kihei Charter Middle School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Derek Barona, I live on the island of Maui and I am 12 years of age. The school I attend is Kihei Charter School. I believe that we should enact this bill so we can benefit ourselves and our wildlife. This could help our future generations become a big part of our future and keep it going on. Stopping the sale and distribution of chemical-based sunscreen could even help our health since some of these chemicals cause birth deformity, cancer, and many more things that harm us. This also helps hold up our entire life cycle and the food chain since if our corals die off so will the marine life and this will disrupt our cycle of life. Even though only 2% of the Earth is coral reefs, those 2% support 25% of all marine life. This also preserves the beauty of these islands and keeps them from becoming dead wastelands. Coral reefs help clean the water around them and keep them from being stinky. Coral reefs support many endangered animals and if we keep these sales going the endangered animals will not be endangered but extinct then also making more species part of the endangered list. We want to support life and keep our Earth thriving, not break it down. I really hope you sign this Bill into law.

Mahalo Nui Loa,

Derek Barona

7th Grade, Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Conner. I live on the island of Maui. I am 12 years old and I go to school at Kihei Charter School. As many of you guys know the sun is always out on Maui so we need sunscreen to protect us. Many people visit here and love to go to the beach but they end up using non reef safe sunscreen. I think it should be illegal to sell chemical sunscreens at stores. These chemicals are very bad because they harm the reefs and without the reefs many fish will die. If all reefs are dead the fish will have no habitat to live on and this will also have a critical impact on people that rely on fish for food.

When people are visiting, they like to go snorkeling because they want to see the coral reefs and the fish but if all the reefs and sea life is dead they won't be able to see it. Tourists are our main income but if the reefs aren't beautiful, they don't want to spend money and see the reefs and the beaches. Dead coral reefs will also affect surfers because they need the reef for waves to form. I am a surfer myself and I would hate it if I couldn't surf anymore. I hope this bill passes so our future generations can see what we got to see.

Thank you for your support and time.

Sincerely,

Conner Beaver
7th Grade Science
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I am writing to testify my opinion on why we should pass SB3001. This is very important to us because non reef safe sunscreen that people are using is not good for them or the environment. Non reef safe sunscreen is polluting the water and destroying coral reefs. We need chemical sunscreen to be banned so we can help coral reefs and oceans. Chemical sunscreen also impacts a lot of marine life and it is not good for any living organisms, even humans. Chemical sunscreen is taking away homes for fish and coral reefs. Please sign this bill so we can save the reefs.

Sincerely,

Lee Cowles
Kihei Charter School
7th Grade Student

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Brodrick Craig. I live on the island of Maui. I am 12 years old and I go to school at Kihei Charter School. I am in 7th Grade and I take 7 classes, one of them being Science. In Science we have been learning about the chemicals in non-reef safe sunscreen and the effects it leaves on the coral reefs and the ocean. The passing of this bill will have a critical impact on all marine life and anyone wanting to visit reefs. I believe it should be unlawful to sell non reef safe sunscreens at stores. I love the water and the reefs and I think if this bill doesn't pass it will be dangerous to go in the water with all the chemicals. The fish will die because their homes will be destroyed and the people who survive on fish and sea life for food will have to find a different resource. The coral collects the chemicals in sunscreen and absorbs them. When the coral absorbs the chemicals it starts bleaching the coral and turning it white. Once the coral is bleached it looks sad and plain. The coral then dies causing the marine life around it to find a different home or die too. Our main source of income in Hawaii is tourism. Our coral is one of our main attractions on the islands. The tourists want to snorkel and see a healthy reef but if the bill doesn't pass, they will not want to come here and they will not want to spend money on snorkel trips and cruises. We will lose our main source of income. We need to stop this. We need to ensure that our future generations will be able to see the corals how they should be. Please sign this bill and help Hawaii be the beautiful place that we need it to be.

Sincerely,

Brodrick Craig
7th Grade Student
Kihei

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I fully support SB3001. I fully support the ban of chemical ingredients in sunscreen because they harm the reef and can cause cancer too. Without the reef we could not have a fishing industry and we would lose the tourist snorkeling industry. Without the reef the marine life would also be affected and our very diverse ecosystem would be reduced because most of the marine animals would either die or move away. It is crucial that we protect the reefs and our community to ensure the state of Hawaii lasts.

Sincerely,

Wyatt van der Lee
7th Grade, Kihei Charter Student

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

I sincerely hope you will pass SB3001. This bill will make it illegal to sell sunscreen that is unsafe for the reef. The reef is a vital part of Hawaii and if it's not protected so many things could happen. The coral reefs are home to many marine organisms and without them many fishermen and women may be out of business and would be a huge loss for the economy. Marine life is one of the most special aspects of Hawaii and we have to protect them and the coral. The coral reefs are also a huge part of tourism for Hawaii. Without the reefs commercial snorkeling and other activities would also not happen which would be a huge loss. The reefs are also very important for our safety as they reduce the impact of breaking waves which at times can stop flooding. Other than protecting coral, the sunscreen that this bill is banning is known to sometimes cause cancer and endocrine problems in humans. If SB3001 is to pass it would be very beneficial for many living organisms and our environment as a whole. Please pass SB3001. It would help everyone.

Sincerely,

Bodhi Williams

7th grade, Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Isabell Shiffler and I live on the island of Maui. I am 12 years old and I go to Kihei Charter School. I am writing this testimony because I want to make my opinion of SB3001 heard. I feel like this Bill is a step in the right direction. We need to ban toxic chemicals in sunscreen products. Imagine what the future your kids and their kids will have to live in if we don't do anything about this issue? Wouldn't you want a happy life for your family? Well, if you do, we should pass SB3001 and start spreading more awareness. I'm not saying it will be easy, what I'm saying is that is imperative that we do—for our survival and the health of our planet. In the bill it stated "Toxic chemicals impact marine life" which is correct, so why would we not pass SB3001? If we care, we will take action now instead of watching marine life suffer. I Know we can do something about. That is why my classmates and I are writing testimonies. To convince you to help us take action and ban these chemicals. Please do what's pono.

Mahalo nui loa,

Isabell Shiffler
7th grade student
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Jessica Rosado. I live on the island of Maui. I am 12 years old and I go to school at Kihei Charter School. I am here to support SB3001. I support this bill because marine life is being impacted by chemical ingredients in sunscreen. This not only impacts marine life but also our lives. Chemical ingredients that have not been banned in sunscreen affect our community. This affect will cause us to not be able to enjoy our clear stunning waters, we would not be able to see our stunning waters the same way anymore since all the coral will be dead and all the fish and other marine organisms will be gone too. Unfortunately, this could happen in Hawaii if we are not careful. Our ocean and our community are far more important than the materials things we surround ourselves with. Please help save our ocean and community; pass SB3001.

Mahalo for your time,

Jessica Rosado
7th Grade
Kihei Charter School

To: Senator Mike Gabbard, Chair; Senator Clarence K. Nishihara, Vice Chair; and Members of the Committee on Agriculture and Environment

Re: SB3001 Relating to the Unlawful Sale and Distribution of Chemical Based Sunscreen

Position: Strong Support

My name is Brandon Ramirez. I am 12 years old and I attend Kihei Charter School.

I think this SB3001 is an excellent initiative! I think it will help protect marine species from extinction. I think that we can say that SB3001 is good for the environment as a whole and can help our future generations in and out of the water. Signing SB3001 into law would not only mean a cleaner environment but also it will preserve the fish that Hawaii needs to thrive. In my childish opinion I say that all the current proposed bills about banning chemical ingredients in sunscreen are worthy of being fully investigated, fully executed, and signed into law. I'm sure the state of Hawaii would be better off with this bill in effect rather than waiting until things get worse and noticeable to tourists. Please do what's right for all and ban chemicals from entering our ocean. We already have a safe alternative to protect people from the sun, mineral-based sunscreen. What are we waiting for? Nothing. Let's cast our vote for my generation and future generations on this beautiful planet Earth that we call home. Us Hawaiians are making history. We are setting the precedence for all other states and countries to follow. We need to show the world that in Hawaii the word "Aloha" means more than hello and goodbye, it means love. We protect what we love and we love the ocean. Let's live with aloha in our hearts and sign SB3001 into law.

Mahalo nui loa for your time and consideration.

Sincerely,

Brandon Ramirez
7th Grade Science Student
Kihei Charter School

SB-3001

Submitted on: 2/1/2022 8:25:20 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Tabatha Knudson	Individual	Support	No

Comments:

I strongly support this bill! The current sunscreen law is not enough to ensure the health and wellbeing of our community, including the environment.



TO: Senate Committee on Agriculture and Environment
Senator Mike Gabbard, Chair
Senator Clarence K. Nishihara, Vice Chair

FROM: Lynn Miyahira representing Public Access to SunScreens (PASS) Coalition

DATE: Wednesday, February 2, 2022

TIME: 1:00 PM

PLACE: Via Videoconference

Re: SB 3001 - Relating to Sunscreen

Position: Opposed

The [Public Access to SunScreens](#) (PASS) Coalition is a multi-stakeholder coalition composed of public health groups, dermatologists, sunscreen manufacturers, and leading advocates for skin cancer patients. The PASS Coalition opposes this measure as it will create additional barriers for consumers to access their choice of safe, effective and FDA-approved sunscreens as a skin cancer prevention tool.

We ask that the legislature hold off on passing SB 3001 or any other legislation on sunscreen ingredients, until more data on environmental and public health impacts are available.

The use of sunscreen is an important evidence-based sun-safe practice. It is well known that utilizing comprehensive sun-safe practices is one of the most effective ways to reduce the risk of skin cancer, including the regular use of sunscreen, wearing sun protective clothing, hats and sunglasses, and seeking shade. Skin cancer prevention tools, such as broad-spectrum sunscreens that protect against both UVA and UVB rays, must be combined with comprehensive educational tools to ensure consumer awareness of the risks of skin cancer due to excessive sun exposure.

Hawaii Residents Are at Higher Risk for Skin Cancer

Some notable skin cancer and sun safety behavioral statistics include:

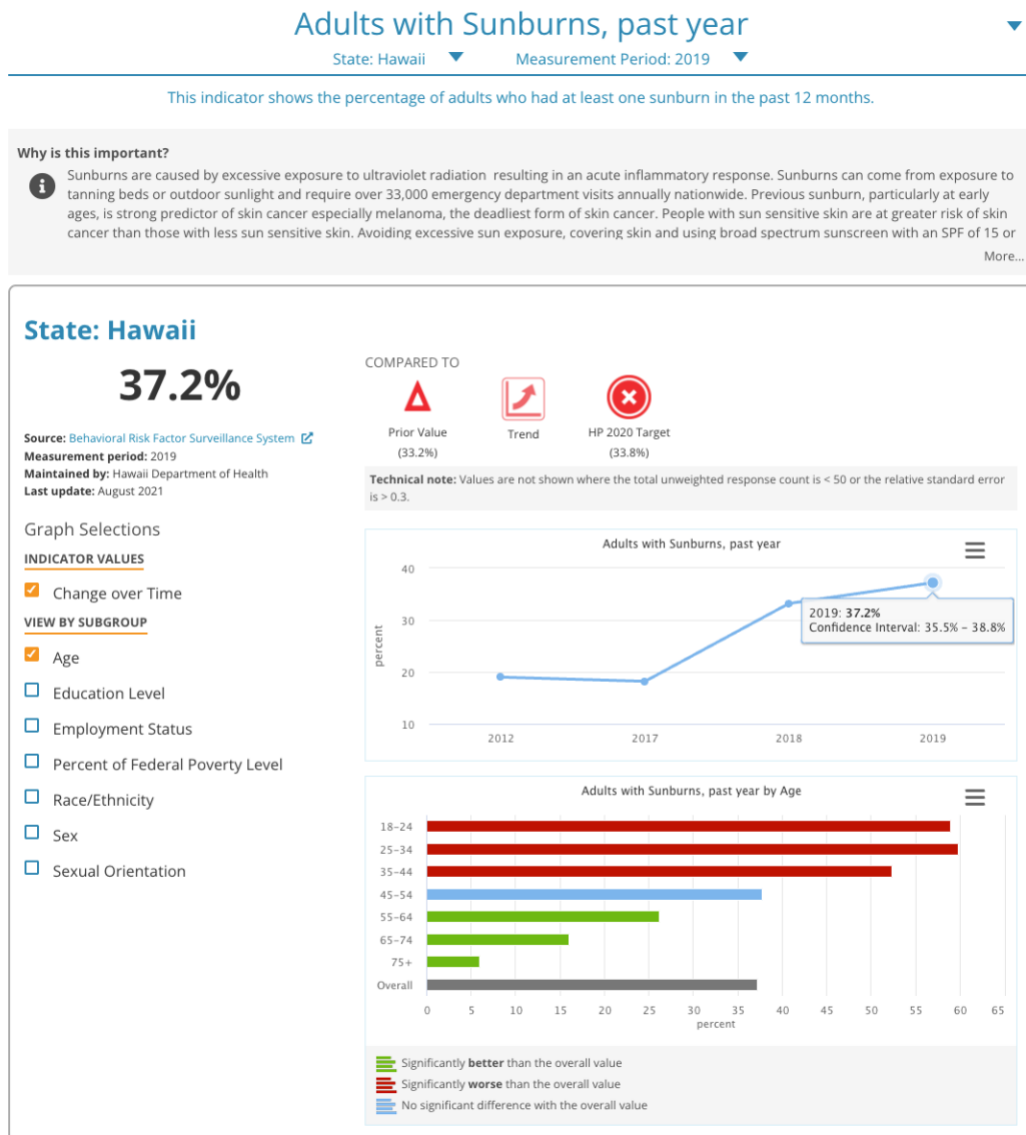
- Native Hawaiians and other Pacific Islanders suffer from double the melanoma mortality rate than the State averageⁱ
- Researchers have found that just *one* blistering sunburn in childhood or adolescence more than doubles a person's chance of developing melanoma later in lifeⁱⁱ

- Hawaii has one of the highest daily UV index averages in the nation.ⁱⁱⁱ On a scale of 0 – 12, Hawaii has over nine months of the year in very-high (8) to extremely high (11) UV indexes, making it crucial public health issue for residents to have access multiple tools to protect them from sun exposure
- In 2019, more than one in three Hawaii residents surveyed reported having a sunburn in the last 12 months, nearly double from the previous year^{iv} – and having just five or more sunburns in your lifetime is known to double your risk for melanoma^v
- Sun safe practices are getting significantly worse since 2017, especially among adults ages 18 – 44, according to the Hawaii Health Matters Community Dashboard.

Table 1: Adults with at least one sunburn in the last 12 months

Source: Hawaii Health Matters, Department of Health

<http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=3029&localeId=14>



The Science Touted by Sunscreen Ban Advocates Is Flawed

Despite the known risk of skin cancer, Hawaii and a handful of other jurisdictions have placed restrictions on the sale of sunscreens based on limited laboratory testing that led policymakers to believe banning sunscreen would improve coral reef health. The early studies, however, did not fully consider the complexity of a coral reef system and had scientific limitations. Importantly, findings from a 2019 study by Dr. Carys Mitchelmore of the University of Maryland contradicts an earlier study by Dr. Craig Downs that has been widely promoted by advocates of the sunscreen ban. Dr. Mitchelmore's study uses rigorous methodology and shows actual levels of oxybenzone sampled from sea water in Hawaii to be 141 times lower than previously stated by Dr. Downs, and 1,020 times below levels considered toxic to coral.^{vi}

The limited studies that purported to show a link between sunscreen exposure and coral toxicity are methodologically flawed and should not be used for evidence-based policy making based on EPA data reliability standards. Subsequent follow-up studies with more rigorous analyses have not replicated the work by Dr. Downs, and do not support the conclusions.

Congress Has Directed the National Academy of Sciences to Conduct a Comprehensive Study

For that reason, banning sunscreen will have little impact on protecting coral reef. The overwhelming consensus amongst the scientific community is that coral decline is primarily caused by rising ocean temperature and ocean acidification.^{vii} Other causes include land-based source pollution, water quality issues due to poor wastewater management, sedimentation and excess nutrification.^{viii} As a result, the United States Congress directed the National Academy of Sciences (NAS) to evaluate the latest science available on the correlation between coral reefs and sunscreens and the potential public health impact of limiting access to sunscreen.

This NAS study, titled "[Environmental Impact of Currently Marketed Sunscreens and Potential Human Impact of Changes in Sunscreen Usage](#)," is being conducted right now as an objective review of these issues by leading scientific experts. The project description is as follows:

"Concerns have been raised about the potential toxicity of sunscreens to a variety of marine and freshwater aquatic organisms, particularly corals. At the same time, there are concerns that people will use less sunscreen rather than substituting sunscreens with UV filters that are considered environmentally safe. This study will review the state of science on use of currently marketed sunscreen ingredients, their fate and effects in aquatic environments, and the potential public health implications associated with changes in sunscreen usage."^{ix}

This study, sponsored by the U.S. Environmental Protection Agency, is currently examining research concerning both the environmental and human health impacts of access to sunscreen. This independent study is evaluating the scientific merit of current science and identify gaps in our current understanding of coral reef environmental health and human health risks of skin cancer. All NAS studies involve multiple strategies to reduce bias and to synthesize the best available science.

NAS Study Should be Completed Before Legislators Make Further Decisions on Consumer Sunscreen Choice

The conclusion of this NAS study – expected soon in spring 2022 – will inform future decisions of policymakers to ensure access to sunscreens while also protecting the coral reefs. Until this study is completed, legislation like SB 3001 should be suspended as there are currently insufficient data to inform a risk/benefit analysis between protecting the marine environment and protecting the public’s health. It is important that the legislature wait for unbiased scientific analysis and consensus.

FDA Advises Continued Use of Sunscreens

In addition to the lack of peer-reviewed evidence on the environmental impact of sunscreens, the impact on human health is also still being researched. On September 24, 2021, the Food and Drug Administration (FDA), which regulates sunscreens as over-the-counter (OTC) drugs for the prevention of sunburn and skin cancer, issued a [final order](#)^x that concluded that, “In the short term, these new authorities essentially preserve status quo marketing conditions for these sunscreens” and that “most sunscreens on the market are in compliance with the deemed final order.” **To be clear, the FDA’s final order issued on September 24, 2021 did NOT recommend any changes to currently marketed sunscreens.**

Earlier this year, the FDA also posted an article titled, “[Shedding More Light on Sunscreen Absorption](#)^{xi}” that explained that while the FDA was seeking more information on the absorption levels of sunscreen ingredients, including avobenzone, oxybenzone, octocrylene, homosalate, octisalate, and octinoxate, it still advises their continued use. The FDA clearly stated, “Absorption does NOT equal risk – the FDA advises continued use of sunscreens” and noted that:

“The findings in these studies do not mean that the FDA has concluded that any of the ingredients tested are unsafe for use in sunscreens, nor does the FDA seeking further information indicate such. The agency’s proposed rule requested additional safety studies to fill in the current data gaps for these ingredients. The rule also proposed that two active ingredients (zinc oxide and titanium dioxide) are generally recognized as safe and effective for use in sunscreens, and additional data was not requested for them.

Given the recognized public health benefits of sunscreen use, the FDA strongly advises all Americans to continue to use sunscreens in conjunction with other sun protective measures (such as protective clothing) as this important rulemaking effort moves forward.”^{xii}

The Hawaii state law signed in July 2018 already eliminated the OTC sale of the ingredients oxybenzone and octinoxate. **SB 3001 would expand this ban to include the most utilized alternative sunscreen**

ingredients and could potentially remove approximately 64% of the sunscreens currently available in the United States from being sold in Hawaii.

The proposed legislation could **significantly reduce consumer choice** of and access to sunscreen in Hawaii, where sunscreen is often used not only in the ocean, but whenever people are outdoors doing activities such as hiking, golfing, walking, running, cycling or working outside. This puts Hawaii residents at greater risk for skin cancer with only limited peer-reviewed scientific evidence on sunscreen ingredients and its impact on environmental and human health.

Again, we ask that the legislature hold off on passing SB 3001, or any other legislation on sunscreen ingredients, until more data on environmental and public health impacts are available.

If you have any questions about the PASS Coalition or the content of this testimony, please feel free to contact me at lmiyahira@iq360inc.com.

Mahalo you for the opportunity to testify.

Sincerely,

Lynn Miyahira
Public Access to SunScreens (PASS) Coalition

ⁱ <http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=2389&localeId=14&localeChartIdxs=1%7C2%7C4>

ⁱⁱ <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

ⁱⁱⁱ <https://www.epa.gov/sunsafety/sun-safety-monthly-average-uv-index>

^{iv} <http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=3029&localeId=14>

^v <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

^{vi} <https://www.sciencedirect.com/science/article/pii/S0048969719310125?via%3Dihub>

^{vii} <https://www.nature.com/articles/nature21707>

^{viii} <https://www.epa.gov/coral-reefs/threats-coral-reefs>

^{ix} <https://www.nationalacademies.org/our-work/environmental-impact-of-currently-marketed-sunscreens-and-potential-human-impacts-of-changes-in-sunscreen-usage>

^x <https://www.accessdata.fda.gov/scripts/cder/omuf/index.cfm?event=NewMonograph&ID=D1D673977F06B1486C355A8162942E5B9CC2734AE65E4585CB6C013EDD5B03F3&OMUFID=OTC000006>

^{xi} <https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption>

^{xii} <https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption>



February 1, 2022

Re: **STRONG SUPPORT** for **SB3001** Relating to Environmental Protection

Aloha Chair Gabbard, Vice Chair Nishihara, and Senate Committee on Agriculture and Environment,

Mālama Pūpūkea-Waimea (MPW) is a Hawai'i non-profit organization founded on the North Shore of O'ahu in 2005. Our mission is "working to replenish and sustain the natural and cultural resources of the Pūpūkea and Waimea ahupua'a for present and future generations through active community stewardship, education, and partnerships." For eighteen years, we have focused our stewardship and education efforts on the Pūpūkea Marine Life Conservation District (MLCD), one of only three MLCDs on O'ahu and eleven statewide.

Mālama Pūpūkea-Waimea
Post Office Box 188
Hale'iwa, HI 96712

Board of Directors

Denise Antolini
Anne Chung
Sydney Covell
Bob Leinau
Jacqueline Leinau

Advisory Council

Athline Clark
John Cutting
Dr. Alan Friedlander
Debbie Gowensmith
Maxx E. Phillips
Bill Quinlan
Palakiko Yagodich

Staff

*Jenny Yagodich, Director of
Educational Programs &
Makai Watch Coordinator*

Federal Nonprofit Organization
501(c)(3) FEIN 27-0855937
www.pupukeawaimea.org
info@pupukeawaimea.org

Due to the area's extreme popularity with visitors, we see first-hand the unfortunate destructive and cumulative impacts chemicals in sunscreens have on our nearshore environment. We **strongly support SB3001** to prohibit the sale and distribution of sunscreen products containing ingredients not generally recognized as safe and effective as defined by the Food and Drug Administration.

We make an effort to educate beachgoers about coral health and the detrimental effects chemical sunscreens have on them. In speaking with visitors, they often say they chose their sunscreen because a sticker on the front of the bottle said "reef safe – no oxybenzone" but after learning more, they realize that those products do indeed still contain coral-killing chemicals such as avobenzone, homosalate, octisalate, and octocrylene – all of which are no longer recognized as safe and effective as defined by the Food and Drug Administration.

It is our hope that the only choices available in stores will be "really reef safe" sunscreens – and thanks to environmentally conscious companies, many of which are local, there are numerous mineral sunscreen options readily available for consumers.

Please support and pass **SB3001** to benefit the health and resiliency of Hawai'i's coral reef ecosystems.

Mahalo nui,

Jenny Yagodich

Jenny Yagodich
Director of Educational Programs &
Makai Watch Coordinator
Mālama Pūpūkea-Waimea

Arwen Revere on behalf of Wild Kids

Regarding Senate Bill 3001 regarding the use and distribution in the State of certain single-use plastics

February 1st, 2022

Aloha Agriculture and Environment Committee members,

My name is Arwen Revere and I am a high school student from Kailua. Today, I am representing the environmental organization Wild Kids. We are in strong support of Senate Bill 3001 relating to sunscreens. We have already seen the harmful effects of harsh chemicals on our reef, which are vital to supporting industries such as tourism.

Banning certain chemicals in sunscreens will protect these beautiful ecosystems for future generations. Many companies will also be forced to innovate and formulate reef-safe sunscreens. This helps to shift consumers' mindsets because they will see that there are healthier outcomes.

I and the other Wild Kids' members are asking you to please protect our planet and prevent any further damage to our oceans. Thank you for the opportunity to testify. We hope you consider our view on this important matter.

Sincerely,

Arwen Revere on behalf of Wild Kids



Kenneth J. Tomecki, MD, FAAD President
Mark D. Kaufmann, MD, FAAD President-elect
Neal Bhatia, MD, FAAD Vice President
Linda F. Stein Gold, MD, FAAD Vice President-elect
Marta J. Van Beek, MD, MPH, FAAD Secretary-Treasurer
Daniel D. Bennett, MD, FAAD Assistant Secretary-Treasurer
Elizabeth K. Usher, MBA Executive Director & CEO



February 1, 2022

The Honorable Mike Gabbard, Chair
Senate Committee on Agriculture and Environment
Hawaii State Capitol, Room 201
Honolulu, HI 96813

Dear Chairman Gabbard:

On behalf of the Hawaii Dermatological Society and the nearly 16,500 U.S. members of the American Academy of Dermatology Association (AADA), we write to urge you to oppose SB 3001, legislation that would prohibit the sale, offer for sale, or distribution in the state of any sunscreen that contains active ingredients that are not generally recognized as safe and effective (GRASE) by the Food and Drug Administration (FDA) without a prescription issued by a licensed health care provider. As dermatologists we dedicate ourselves to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin's DNA, which is the first stage of skin cancer. We oppose this legislation and urge you to strongly consider the broad implications of banning the use of sunscreens containing certain ingredients, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors of Hawaii face.

Recently, the FDA proposed a rule categorizing two ingredients, zinc oxide and titanium dioxide, as GRASE. The proposed rule also asks manufacturers to provide more data about the safety of chemical sunscreens containing avobenzone, ensulizole, homosalate,

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meradimate, octinoxate, octisalate, octocrylene and oxybenzone. Industry is currently working with the FDA on testing requirements for these ingredients.

The request for more data does not mean that the ingredients are unsafe. The FDA has not asked the public to refrain from using sunscreens that contain any of these ingredients.

Chemical (organic) sunscreen filters are an important component of many sunscreen products. They provide ample broad-spectrum protection against UV radiation. This legislation would remove access to chemical filters, leaving only mineral filters, which are less effective. Mineral sunscreen products often leave a whitish residue on the skin. Many, especially individuals with darker skin tones, find these to be unacceptable for use.

UV light exposure is a risk factor for all types of skin cancer and sunscreen use is a major photo-protective method. UVA radiation damages deeper layers of the skin and contributes to the development of melanoma, the deadliest form of skin cancer. UVB radiation is the primary cause of sunburn and plays a key role in the development of skin cancer in the skin's superficial layers. Both types of rays suppress the immune system.¹ Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer.^{2,3} Melanoma, the deadliest form of skin cancer, is the second most common form of cancer in women, aged 15-29 years old. Caucasian men, age 50+ are at a high risk of developing melanoma.^{4,5,6} In 2021, 460 new cases of melanoma are expected in Hawaii.⁷ The annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, and the average annual cost of treating melanoma is approximately \$3.3 billion.⁸

¹ Lim HW, James WD, Rigel DS, Maloney ME, Spencer JM, Bhushan R. Adverse effects of ultraviolet radiation from the use of indoor tanning equipment: time to ban the tan. *Journal of the American Academy of Dermatology*. 2011 Apr 30;64(4):e51-60.

² Stern RS. Prevalence of a history of skin cancer in 2007: results of an incidence-based model. *Arch Dermatol*. 2010 Mar;146(3):279-82.

³ Robinson JK. Sun Exposure, Sun Protection, and Vitamin D. *JAMA* 2005; 294: 1541-43.

⁴ Siegel RL, Miller KD, Jemal A. Cancer statistics, 2017. *CA Cancer J Clin*. 2017; 67:7-30.

⁵ Little EG, Eide MJ. Update on the current state of melanoma incidence. *Dermatol Clin*. 2012;30(3):355-61.

⁶ NAACCR Fast Stats: An interactive quick tool for quick access to key NAACCR cancer statistics. North American Association of Central Cancer Registries. <http://www.naacr.org/>. (Accessed on 3-10-2016).

⁷ American Cancer Society. Cancer Facts and Figures 2021. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf>

⁸ Guy GP, Machlin S, Ekwueme DU, Yabroff KR. Prevalence and costs of skin cancer treatment in the US, 2002–2006 and 2007–2011. *Am J Prev Med*. 2015;48:183–7

To prevent skin cancer, the AADA recommends comprehensive sun protection that includes seeking shade; wearing protective clothing, including hats and sunglasses; and applying a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher to exposed skin.

Dermatologists have an interest in patient and public access to safe and effective sunscreen ingredients. The FDA is currently working with industry on safety testing for currently marketed sunscreen ingredients. The FDA is also considering several time-and-extent applications (TEAs) for new sunscreen ingredients to be added to the FDA over-the-counter (OTC) sunscreen monograph. The FDA's conclusion from recent studies on sunscreen ingredient absorption "supports the need for further studies to determine the clinical significance of these findings." FDA further stated that "these findings do not indicate that individuals should refrain from the use of sunscreen."⁹ Sunscreen ingredients have been in use for almost 50 years without any reported systemic adverse side effects. This issue highlights the urgent need for new safe and effective sunscreen ingredients in the United States. With the approval of ingredients that utilize alternative UV filters, the public's health will be better. The AADA continues to participate in the discussion with the FDA and manufacturers regarding availability of current and new ingredients.

We are concerned about the potential environmental impact of UV-filters. The potential adverse effects related to the levels of UV-filters in the water supply and marine life (as well as humans) are an emerging science. A review of 12 studies evaluating 14 different organic UV filters in seawater near coral reefs determined that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers reported toxicological findings from no response to a variety of biological effects; these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least 1000-fold higher than those reported in seawater in real life.¹⁰ The review concludes "there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters."

⁹ Matta, MK, Florian, J, Zusterzeel, R, Nageswara RP, Patel, V, Volpe, DAPhD, et al. Effect of Sunscreen Application on Plasma Concentration of Sunscreen Active Ingredients: A Randomized Clinical Trial. *Journal of the American Medical Association* 323, No. 3 (2020). 267.

¹⁰ Mitchelmore CS, Burns, EE, Conway A, Heyes A, Davies IA. A critical review of organic ultraviolet filter exposure, hazard, and risk to corals. *Environ Toxicol Chem.* 2020 (00);00:1-21. Online 2 February 2021 in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/etc.4948

Our organizations advocated for the enactment of the Further Consolidated Appropriations Act, 2020, by which the U.S. Congress directed the Environmental Protection Agency (EPA) to contract with the National Academy of Sciences (NAS) to conduct a scientific literature review of current sunscreens' potential risk to the marine environment. The study will consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of research is necessary to understand how UV filters may affect the environment. We encourage you to consider these ongoing efforts before taking any action to remove a product that has been proven to be effective against skin cancer. Based on current data, removing specific sunscreen ingredients and products from the market would be premature. Doing so would deprive the public of an integral component of photoprotection to decrease the risk of skin cancer.

Please consider the public health consequences of removing access or attaching stigma to sunscreens containing certain ingredients. We urge you to oppose SB 3001 for the reasons above, and we request that Hawaii give the FDA more time to evaluate new sunscreens for public use and for the NAS to conduct its review and report its findings. We appreciate the opportunity to provide written comments on this important public health issue. For more information, please contact Lisa Albany, director of state policy for the AADA, at LAlbany@aad.org or (202) 712-2615.

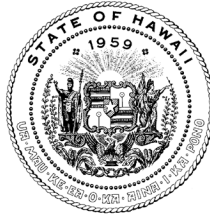
Sincerely,



Kenneth J. Tomecki, MD, FAAD
President
American Academy of Dermatology Association

Patrick M. Ellison, MD, FAAD
President
Hawaii Dermatological Society

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 2, 2022
1:00 PM**

State Capitol, Conference Room 224 & Videoconference

**In consideration of
SENATE BILL 3001
RELATING TO SUNSCREEN**

Senate Bill 3001 proposes, beginning January 1, 2023, to prohibit the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration (FDA), without a prescription issued by a licensed health care provider. **The Department of Land and Natural Resources (Department) appreciates the intent of this measure and offers the following comments.**

Currently, the FDA has listed 16 active ingredients as “generally recognized as safe and effective” (GRASE) for use in sunscreen products, including the two that are currently banned in Hawai‘i (oxybenzone and octinoxate) as well as several for which bans have been proposed previously (octocrylene, avobenzone, homosalate, and octisalate).

A proposed rule currently being reviewed by the FDA would change the status of 14 of these ingredients to “not GRASE”. The status changes for two of these, aminobenzoic acid and trolamine salicylate, are due to data showing concerns regarding human health and safety. The status changes for the remaining 12 are due to inadequate data to support a complete safety finding. Further, in the FDA’s outreach on this subject, they suggest that a ruling on the safety of a subset of these ingredients could be deferred to allow time for additional safety information to be gathered.

As these changes have not yet been finalized, this bill would not have a meaningful effect until such time that the FDA creates a definitive ruling per their proposed rule. Until then, it is not clear which particular ingredients would end up being prohibited in Hawai‘i as a result of Senate Bill 3001.

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

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

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

Beyond this, the FDA bases their rules and status determinations on the effects of these ingredients on humans with no consideration regarding potential environmental effects. The original purpose of the Act that banned the sale of sunscreen with oxybenzone or octinoxate¹ was to preserve marine ecosystems. If the intent of Senate Bill 3001 is to limit the usage of chemicals that may have deleterious effects on coral reef ecosystems and other natural resources, the Department would recommend that the bill name specific ingredients which have documented negative environmental effects.

The following ingredients found in sunscreens would fit this criterion: octocrylene, avobenzene, homosalate, and octisalate.

The Department recognizes the concerns about the presence of avobenzene and octocrylene in the nearshore marine environment. There is growing body of science that suggests these chemicals may have negative effects on corals and other marine life. Octocrylene is now the dominant UV-sunscreen contaminant in coastal waters.² Recent scientific studies suggest that octocrylene may have negative impacts in aquatic environments equivalent to oxybenzone (already banned from sunscreens in Hawai‘i). Octocrylene functions as an endocrine disruptor, a metabolism disruptor, and a reproductive disruptor. It has also been shown to reduce the ability of coral symbionts to photosynthesize, and evidence suggests that it can have toxic impacts to a variety of aquatic organisms including corals, fish, mammals, and plants.³

Avobenzene has been shown to cause toxicity to the light-reactions of photosynthesis which can cause corals to bleach. Avobenzene is also an endocrine disruptor, and can disrupt fat metabolism.³ This could reduce coral resilience during warming events as bleached corals depend extensively on fat metabolism in order to survive.⁴

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As a result of these recent scientific findings, we feel that prohibiting the sale of products containing octocrylene, avobenzene, homosalate, or octisalate would likely benefit the health and resiliency of Hawai‘i’s coral reef ecosystems. At the very least, the Department would recommend support for increased monitoring of various sunscreen chemicals at high-use

¹ Act 104 (SLH 2018) established section 342D-21, which prohibits the sale or distribution of sunscreen that contains oxybenzone or octinoxate.

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swimming areas and further research examining the effects of these chemicals on the nearshore marine environment in Hawai‘i.

The Department supports the use of sunscreens that do not contain chemicals that are harmful to marine life, particularly non-nano particle, mineral-based sunscreens, as well as sun-protective clothing, as alternatives to organic chemical sunscreens. The Department continues to conduct outreach efforts to help the public understand the issues regarding use of chemical sunscreens in the ocean so they can be better informed and make better choices regarding sun protection. These efforts include information on the Department’s Division of Aquatic Resources website, focused one-on-one outreach, news releases, videos, interaction with partner organizations, and meetings with boat tour operators and vendors who sell sunscreen. The Department continues to explore other ways to inform the public on this issue.

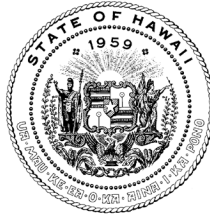
It should be noted that, although it is important to address all potential coral reef ecosystem stressors, the primary concerns with Hawaii’s coral reefs continue to be related to land-based sources of pollution, unsustainable fishing practices, invasive species, and climate change. Continued legislative support to reduce these main stressors will have the largest impact on coral reef resilience and recovery.

Thank you for the opportunity to comment on this measure.

Citations

- Ahn, Sungjin, et al (2019), A long-wave UVA filter avobenzone induces obesogenic phenotypes in normal human epidermal keratinocytes and mesenchymal stem cells, *Archives of Toxicology* <https://doi.org/10.1007/s00204-019-02462-1>
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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 2, 2022
1:00 PM

State Capitol, Conference Room 224 & Videoconference

In consideration of
SENATE BILL 3001
RELATING TO SUNSCREEN

Senate Bill 3001 proposes, beginning January 1, 2023, to prohibit the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration (FDA), without a prescription issued by a licensed health care provider. **The Department of Land and Natural Resources (Department) appreciates the intent of this measure and offers the following comments.**

Currently, the FDA has listed 16 active ingredients as “generally recognized as safe and effective” (GRASE) for use in sunscreen products, including the two that are currently banned in Hawai‘i (oxybenzone and octinoxate) as well as several for which bans have been proposed previously (octocrylene, avobenzone, homosalate, and octisalate).

A proposed rule currently being reviewed by the FDA would change the status of 14 of these ingredients to “not GRASE”. The status changes for two of these, aminobenzoic acid and trolamine salicylate, are due to data showing concerns regarding human health and safety. The status changes for the remaining 12 are due to inadequate data to support a complete safety finding. Further, in the FDA’s outreach on this subject, they suggest that a ruling on the safety of a subset of these ingredients could be deferred to allow time for additional safety information to be gathered.

As these changes have not yet been finalized, this bill would not have a meaningful effect until such time that the FDA creates a definitive ruling per their proposed rule. Until then, it is not clear which particular ingredients would end up being prohibited in Hawai‘i as a result of Senate Bill 3001.

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

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
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Beyond this, the FDA bases their rules and status determinations on the effects of these ingredients on humans with no consideration regarding potential environmental effects. The original purpose of the Act that banned the sale of sunscreen with oxybenzone or octinoxate¹ was to preserve marine ecosystems. If the intent of Senate Bill 3001 is to limit the usage of chemicals that may have deleterious effects on coral reef ecosystems and other natural resources, the Department would recommend that the bill name specific ingredients which have documented negative environmental effects.

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Citations

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February 1, 2022

To: Hawaii State Legislature

From: Kelli Lundgren, resident of Maui, an individual, not a lobbyist

RE: SB3001 Relating to Sunscreen

Dear Sirs and Madams:

To understand my comments, please consider the following FDA sunscreen ingredient designation options:

Option 1: GRASE: an FDA designation labeling a substance as “generally recognized as safe and effective”

Option 2: Non-GRASE: an FDA designation labeling a substance as “not generally recognized as safe and effective”

FDA Option 3: Also important for this bill, another category: **no FDA label**, due to “lack of sufficient data to permit final classification as generally recognized as safe and effective.”

In summary: If SB3001 is passed into law, the 14 to 16 petrochemicals (UV-blocking chemicals) used in sunscreens will likely survive the sale and use in Hawaii and in Hawaii’s reefs for years to come because these chemicals are presently “not FDA labeled as either GRASE or non-GRASE”. The bill states only non-GRASE substances should be banned.

These newer chemicals are still being studied for their effects on people, with considerable research already pointing to negative and damaging hormone disruption in people life, and plant and animal life. Will the FDA rule permanently on this soon? Very likely not.

My comments for consideration:

The FDA’s non-GRASE definition, from what I’ve read, does not address the harm to aquatic environments (oceans, reefs, etc).

Research shows these chemicals to be harmful to reef life. (Please refer to research and data provided by Dr. Craig Downs, PhD and scientific colleagues.)

The FDA does define minerals Zinc Oxide and Titanium Dioxide as GRASE “generally safe”; thus these minerals are currently excellent sun protection options for people. These are great solutions until other substances are proven safe. People can still PROTECT THEMSELVES FROM THE SUN’S EFFECTS using rash guards and minerals.

Hawaii’s Senators and Representatives should not use an FDA study/conclusion determining harm (or not) to people to also apply to harm (or not) to aquatic settings/reefs.

Better laws: Can a competing bill be introduced, or can the 2022 Senate and House bills (SB3001, HB1419 and SB2949) be changed to "ban unproven UV sunscreen chemicals until proven safe to aquatic environments" unless a person has a doctor’s prescription?

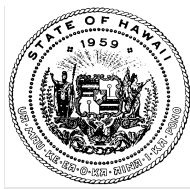
We should treat the ocean as we do people. New substances that could enter the ocean and water systems in substantial quantities should be considered harmful to the ocean until proven "generally safe" using peer-reviewed research.

In just 90 days --- 90 days! --- Hawaii’s most frequented reefs of coral and fish and essential sea life, (200 to 2000 visitors swimming in each reef each day), will find relief from these toxic substances once the law is enforced to prohibit these proven endocrine disruptors to sea life. 90 days!

I am a volunteer at Āhihi-Kīna`u Natural Area Reserve on Maui for the past seven years. Mineral sunscreens work. Rash guards work. You don’t need to look pasted white if minerals are applied properly. I’ve used minerals for at least five years. Visitors also love the alternative when given. Visitors love that they are helping the reef.

I appreciate your time and consideration on this.

Kelli Lundgren
Ka’anapali, Hawaii



**STATE OF HAWAII
DEPARTMENT OF HEALTH**

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

**Testimony COMMENTING on SB3001
RELATING TO SUNSCREEN**

SENATOR MIKE GABBARD, CHAIR

HOUSE COMMITTEE ON AGRICULTURE and ENVIRONMENT

Hearing Date: 2/2/2022

Room Number: 224/videoconference

1 **Fiscal Implications:** This measure may impact the priorities identified in the Governor's
2 Executive Budget Request for the Department of Health's (Department) appropriations and
3 personnel priorities.

4

5 **Department Testimony:** SB3001 seeks to amend HRS 342D to require that sunscreens sold or
6 distributed in Hawaii only contain active ingredients classified by the United States Food and
7 Drug Administration (FDA) as Category 1: *Generally Recognized as Safe and Effective*. The
8 Department has the following comments.

9 The Department recognizes the benefits of the 2018 legislation prohibiting the sale of
10 oxybenzone and octinoxate containing sunscreen products and shares the concerns about the
11 potential impacts of some sunscreen chemicals on coral reefs and human health. It is heartening
12 to see the dramatic increase in availability, variety and consumer acceptance of local and
13 national brand oxybenzone and octinoxate-free options and mineral sunscreen products that have
14 entered the marketplace in the past two years. Use of these products meets standards for public
15 health protection and offers the public a concrete choice to help protect Hawaii's coral reefs and
16 marine environment when enjoying our beaches.

17 However, the risk of skin cancer from sun exposure remains a hazard for the people of
18 Hawaii and visitors and it is imperative that the public health consequences of additional
19 prohibition on sunscreen ingredients are considered.

1 Under the FDA’s proposed update, the only FDA Category 1 active ingredients in
2 sunscreens would be zinc oxide and titanium dioxide, both of which are mineral sunscreens. Of
3 the remaining fourteen approved ingredients, twelve would be classified as Category 3 –
4 *insufficient evidence to determine if they are safe and effective* and two as Category 2 – *Not safe*
5 *or effective*. This change by FDA that would update the GRASE list is still in the proposal stage
6 and cannot become effective for at least 1 year after finalizing. The current GRASE list in effect
7 until FDA’s update is finalized lists all 16 sunscreen ingredients including oxybenzone and
8 octinoxate. If SB3001 were to pass with effective date Jan 1, 2023, oxybenzone and octinoxate
9 would no longer be prohibited in Hawaii until FDA’s rule change went into full effect.

10 The Department is concerned that restricting the sale and distribution of sunscreens to
11 only two approved active ingredients has the potential to increase the risk of skin cancer to
12 Hawaii residents and visitors. This is particularly pertinent to certain individuals who have skin
13 sensitivity or allergy to mineral sunscreens.

14 The Department is not aware of any states or jurisdictions that have passed legislation
15 using FDA Category 3 status as justification for banning or restricting medications or personal
16 care products.

17 The Department supports FDA efforts to evaluate the safety and effectiveness of over-
18 the-counter medications including sunscreens and encourages further study of these chemicals.
19 The Department also supports public outreach and education aimed at encouraging the use of
20 sunscreens that have less impact on coral reefs and the environment as well as alternative sun
21 protection options such as clothing.

22
23 **Offered Amendments:** None

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

SB-3001

Submitted on: 2/1/2022 1:00:47 PM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Jeff Bagshaw	Testifying for DLNR/DOFAW	Support	No

Comments:

While SB2949 and SB3001 work toward protecting our environment against petrochemical sunscreen products, strengthening already existing state law that prohibits two compounds, there are flaws in these bills and there is no justifiable reason to pre-empt the new ordinance passed for Maui County, delaying real protection not just for our reefs, but for our local food safety until 2024. There has been little to no enforcement of the previous state law banning oxybenzone/octinoxate – these products can still be found for sale on Hawai‘i store shelves. Maui County has an enforcement plan in place for its upcoming ban. Will there be effective enforcement for these bills?

We all remember the awful bleaching event of September/October 2015 when average sea water temperatures held steady at 88 degrees F for eight weeks throughout Hawai‘i . We lost an average of 30% of all our reefs across the state in just two months. Two or three more such events and our reefs will be largely gone. Some areas fared better than others, some will never look the same again. No one argues that our reefs face numerous problems, many we can't solve in Hawai‘i alone. We know future bleaching events are coming, it's a matter of when, not if. And we know from past events that reefs that are healthiest to begin with have better chances of some recovery. Preparing for the next event begins today, not January of 2024.

This isn't just about reefs for pretty fish to see when snorkeling. Its also about our food resources, its a matter of environmental justice.

Testing chemical toxicity in a lab setting is the only way to accurately assess effects on some marine organisms. But for skeptics that doubt that time-tested method, here are three studies of data taken from wild animals that show these compounds bioaccumulate, they move up the food chain and are stored in the liver and other organs:

- A 2020 study published in the journal Elsevier showed four common sunscreen agents in blood samples from juvenile Loggerhead sea turtles caught off the coast of Italy. Loggerheads eat invertebrates. Humans in Hawai‘i eat invertebrates such as crab, lobster, tako, and opihi.
- A 2018 study published in Elsevier showed several fish species from a freshwater lake in China had high concentrations of these compounds in liver and gill tissues. Fish eat algae, invertebrates and smaller fish. Humans in Hawai‘i eat limu, invertebrates and fish.

- A 2013 study published in Environmental Science and Technology showed that petrochemical sunscreen compounds were present in liver samples from 70% of wild Franciscana dolphins off the coast of Brazil, showing that these compounds bioaccumulate through the food web. Dolphin species everywhere eat fish. Humans in Hawai'i eat fish.

The proposed state bills are relying on the forthcoming FDA report will focus only on the effects of these chemicals to those who directly apply the products, it will unfortunately not include data on secondary effects.

People who make the choice to not wear sun-protective clothing, who demand to recreate between 10AM and 2PM, who don't like the mineral sun-blocks and choose petrochemical sunscreens instead are imposing their health choices on the rest of us, people who eat from the ocean in Hawai'i. Our society chose to eliminate the effects of second-hand smoke by banning smoking in shared public spaces, in many locations long before the FDA and Surgeon's General said there was data to do so.

The NAS is not a regulatory agency, it will only make recommendations to the EPA. Mineral sun-blocks cannot be patented, so they're not as profitable as lab-produced chemical products. We already have generations of data from credible dermatologists that the most effective sun protection remains clothing or mineral sun-blocks. Luckily, chemistry and biology work the same whether its Brazil, Italy, China or Hawai'i. The beauty of science is that researchers elsewhere can give us information, today.

The US Virgin Islands banned these products in 2019. They didn't wait for more and more reports. Petrochemical sunscreen ingredients bioaccumulate. We don't know the long-term health impacts and medical costs for people who eat from the ocean and accumulate these compounds in their tissues, even if they never applied petrochemical sunscreens to their own skins. This is why the Maui County Council unanimously passed a bill, after listening to dozens of hours of testimony, from over a hundred volunteers and community members and have twice taken the lead to pass laws restricting the sale of these products. So the question becomes why and who are we waiting for, the people who sell these products, so they don't lose money in the short-term, or the people who get their food from our island shores every day?

Mahalo,

Jeff Bagshaw

Volunteer Coordinator, Information and Education Associate

`Ahihi-Kina`u Natural Area Reserve (DLNR/DOFAW)

(808)264-7891 work-cell

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SB-3001

Submitted on: 2/1/2022 9:33:46 PM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Mika Yamazaki	Individual	Oppose	No

Comments:

As a board-certified dermatologist practicing in Hawaii, I urge you to oppose legislation that would further restrict access to sunscreen ingredients. Strongly consider the broad implications of banning the use of certain sunscreens, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors of Hawaii face.

As dermatologists we dedicate ourselves to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin’s DNA, which is the first stage of skin cancer. Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer. Melanoma, the deadliest form of skin cancer, is the second most common form of cancer in women, aged 15-29 years old. The annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, and the average annual cost of treating melanoma is approximately \$3.3 billion.

The potential adverse effects related to the levels of UV-filters in the water supply and marine life are an emerging science. A recent review in the journal Environmental Toxicology and Chemistry of 12 studies concludes “there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters.” The studies evaluating 14 different organic UV filters in seawater near coral reefs determined that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers reported toxicological findings from no response to a variety of biological effects; these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least 1000-fold higher than those reported in seawater in real life.

The National Academy of Sciences (NAS) is conducting a scientific literature review of current sunscreens’ potential risk to the marine environment. The study will consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of research is necessary to understand how UV filters may affect the environment. We encourage you to consider these ongoing efforts before taking any action to remove a product that has been proven to be effective against skin cancer.

A large part of my practice involves doing skin checks and treating pre-cancers and skin cancers, and many of these patients regret not seriously taking measures to protect their skin from the sun, especially in their youth. Many of them grew up during a time when the adverse and cumulative effects of sun damage were unknown and a variety of sun protection options were not available. As a mother of two young children, who love spending time outdoors on a daily basis, I do worry

about the negative effects that prematurely banning sunscreen ingredients will have on Hawaii's youth.

Based on current data, removing specific sunscreen ingredients and products from the market would be premature and hazardous. Doing so would deprive the public of an integral component of sun protection to decrease the risk of skin cancer. Please oppose any future restrictions on sunscreen ingredients. Thank you.

Sincerely,

Mika Yamazaki, MD, FAAD



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February 1, 2022

To: Committee on Agriculture and Environment
Senator Mike Gabbard, Chair
Senator Clarence K. Nishihara, Vice Chair

Fr: Carlos I. Gutierrez, Vice President, State & Local Government Affairs
Consumer Healthcare Products Association

Re: **SB 3001 Relating to Sunscreen - OPPOSE**

On behalf of the Consumer Healthcare Products Association (CHPA), the national trade association representing the leading manufacturers of over-the-counter (OTC) medications, dietary supplements, and consumer medical devices, I'm writing to express strong opposition to SB 3001 – legislation seeking to ban the sale and availability of certain sunscreen active ingredients in the State of Hawai'i.

Scientific studies support wearing sunscreen on a regular basis to protect against skin cancer. Limiting access to sunscreens, especially in a place like Hawai'i which consistently rates high on the ultraviolet (UV) index, needlessly puts both residents and visitors to the Hawaiian Islands at risk of sunburn and one of the most preventable forms of cancer in the world today – skin cancer.

Broad spectrum sunscreens block the full range of ultraviolet rays linked to skin cancer – one of the most common forms of cancer in the world according to the World Health Organization.¹ Eliminating sunscreen options for consumers will likely lead to reduced sunscreen use and needlessly increase the risk of skin cancer for residents, and visitors with no added health benefit from avoiding use of sunscreens altogether.

The State of Hawai'i remains the only American state to have banned the sale of sunscreens containing oxybenzone and octinoxate. Expanding this ban to also

¹ U.S. Food and Drug Administration. "Sunscreen: How to help protect your skin from the sun." <https://www.who.int/news-room/q-a-detail/radiation-protecting-against-skin-cancer>



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include additional sunscreen ingredients increases the risk of skin cancer for Hawaiians.

Consumer access to sunscreen products containing a broad variety of active ingredients, especially in a state with the highest rate of melanoma cases attributed to UV exposure, is a matter of public health and sunscreen use has been proven to reduce the risk of skin cancer.² For these reasons, we oppose passage of SB 3001.

Thank you for taking the time to consider our concerns and feel free to contact me or our local representative, Lauren Zirbel, directly with any follow up questions you may have.

Sincerely,

A handwritten signature in blue ink that reads 'Carlos I. Gutiérrez'.

Carlos I. Gutiérrez
Vice President, State & Local Government Affairs
Consumer Healthcare Products Association
Washington, D.C.
202.429.3521
cgutierrez@chpa.org

² Watts *et al.*, 2018 Sunscreen Use and Melanoma Risk Among Young Australian Adults. *JAMA Dermatol*, 154(9):1001-1009.

February 2, 2022

Senator Mike Gabbard, Chair
Senator Clarence K. Nishihara, Vice Chair
Committee on Agriculture and Environment
Hawaii State Legislature
415 South Beretania Street
Honolulu, HI 96813

RE: Opposition to SB 3001

Dear Chair Gabbard and Vice Chair Nishihara:

On behalf of the members of the Personal Care Products Council (PCPC),¹ I am writing to express our opposition to SB 3001, legislation to prohibit the sale, use or distribution of sunscreen ingredients. This bill will lead to a serious public health issue by banning essential, safe and effective sunscreen products.

The U.S. has Limited Number of Sunscreen Ingredients to Fight Skin Cancer

Sunscreens are a key factor in preventing and reducing the risk of skin cancer and damage from the sun's ultraviolet (UV) rays. Public health organizations, including the American Cancer Society (ACS), American Academy of Dermatology, the Mayo Clinic and the Skin Cancer Foundation, recommend using sunscreen as part of a safe-sun regimen. The Centers for Disease Control and Prevention's Sun Safety recommendations note the importance of daily sunscreen use, including on cloudy and overcast days, to help prevent most skin cancers. And, according to the World Health Organization (WHO), four out of five skin cancer cases can be prevented by following safe-sun practices, including using sunscreen regularly.

Sunscreen ingredients must be approved for use by the U.S. Food and Drug Administration (FDA) and are a crucial and well-recognized tool in the fight against skin cancer and premature skin aging. The U.S. has a limited number of approved sunscreen ingredients to develop products that protect consumers from the harmful effects of solar radiation.

Hawai'i Residents at High Risk for Skin Cancer

Hawai'i residents are at high risk for developing skin cancer. ACS estimates that melanoma, the most serious form of skin cancer, will be one of the leading causes of new cancer cases in Hawai'i in 2022, with an increase in melanoma rates over the past year. Hawai'i has one of the highest daily UV index averages in the nation, making protecting residents from sun exposure a public health priority.

Environmental Impact of Sunscreens is being Evaluated by the National Academies of Science, Engineering, and Medicine (NASEM)

¹ Founded in 1894, the Personal Care Products Council (PCPC) is the voice and advocate for 600 member companies representing the \$499.6 billion global cosmetics and personal care products industry. PCPC's members represent approximately 90% of the U.S. beauty industry and are some of the most beloved and trusted brands in beauty and personal care today. As the manufacturers, distributors and suppliers of a diverse range of products millions of consumers rely on every day – from sunscreens, toothpaste and shampoo to moisturizer, makeup and fragrance – PCPC's member companies are global leaders committed to product safety, quality and innovation.

This legislation does not consider the full body of scientific evidence to establish whether UV filters pose an ecological threat to Hawaiian reef systems. This includes considerations such as the suitability and reliability of existing data to assess environmental risks in addition to the well-recognized causes of coral reef decline in Hawai'i and the rest of the world, including climate change, land-based pollution, and other human activities, such as physical damage to corals from recreational activities.²

Policy decisions that will adversely impact public health should not be made ahead of a scientific consensus on this issue. To reduce bias and to synthesize the best available science, the United States Congress directed the NASEM to evaluate the presence and potential impacts of organic and inorganic UV filters in freshwater and marine environments, as well as the potential public health impact of limiting access to sunscreens. The findings of the review, which is sponsored by the U.S. Environmental Protection Agency (EPA), are expected in early 2022. Making environmental management decisions on sunscreens based on current insufficient and, in some cases, unreliable scientific data may lead to unintended negative health consequences, such as fewer available sunscreens and an increase in the prevalence of skin cancer while providing limited, if any, environmental improvement. PCPC encourages industry, academia, NGOs, federal agencies and the state of Hawai'i to work together to ensure that both the reef ecosystems and the health of Hawai'i's residents are protected.

By passing this bill, the Legislature could significantly reduce consumer options when making important health decisions. Ensuring consumers have access to products containing a wide variety of sunscreen active ingredients is critical and an important contribution to FDA's public health mission.

We respectfully ask that you oppose SB 3001. Thank you for your consideration and the opportunity to comment.

Sincerely,



Karin Ross
Executive Vice President, Government Affairs

² Mitchelmore, C. L., Burns, E. E., Conway, A., Heyes, A., & Davies, I. A. (2021). A critical review organic ultraviolet filter exposure, hazard, and risk to corals. *Environmental Toxicology and Chemistry*, 40(4), 967–988. <https://doi.org/10.1002/etc.4948>. See also Burns, E.E. & Davies, I.A. (2021). Coral Ecotoxicological Data Evaluation for the Environmental Safety Assessment of Ultraviolet Filters. *Environmental Toxicology and Chemistry*. DOI: 10.1002/etc.5229. See also Dyer, S.D. & Green, N.S. (2021). Use of Eco-epidemiology to Assess the Potential Risks of UV Filters to Corals. Presentation to National Academies of Science, Engineering and Medicine, 16 September 2021. <https://www.nationalacademies.org/event/09-16-2021/docs/D885731178D23BF914365FE2D192B964EC6504FE7A7B>.

Carla J. Nip-Sakamoto, M.D.
1329 Lusitana Street, Suite 109
Honolulu, Hawaii 96813

TO: Senate Committee on Agriculture and Environment
Senator Mike Gabbard, Chair
Senator Clarence K. Nishihara, Vice Chair

FROM: Carla Nip-Sakamoto MD, Dermatologist

DATE: Wednesday, February 2, 2022

TIME: 1:00 p.m.

TESTIMONY: Written

RE: SB 3001 – Relating to Sunscreen

Position: Opposed

As a Hawaii dermatologist who has diagnosed and treated thousands of skin cancer patients in my 30 years of experience, I have spent countless hours educating patients, colleagues, friends and family of the proven value of comprehensive sun protection. This includes sunscreen, protective clothing, sunglasses, shade and avoidance of peak sunlight. We, as a community, have come a long way in understanding the perils of repetitive and prolonged sun exposure.

There is widespread awareness of skin cancer prevention and early detection. As a result, many skin cancers are treated at an early stage, reducing morbidity and mortality, as well as disfiguring surgeries. Our keiki have learned that sun safety is smart and prevents sunburn and skin damage.

One in five Americans will develop skin cancer in their lifetime. Melanoma often kills people in the primes of their lives. Unprotected sun exposure is the most preventable risk factor for skin cancer, just as not smoking reduces the risk of lung cancer.

The U.S. Food and Drug Administration (FDA) is asking for more safety information on 12 non-mineral sunscreen ingredients (oxybenzone, octinoxate, avobenzone, octocrylene, octisalate, homosalate, ensulizole, padimate O, sulisobenzene, cinoxate, dioxybenzone, meradimate). Legislation to restrict access to these ingredients before such information is presented is premature. In addition, the National Academy of Sciences (NAS) is undergoing review of the scientific literature related to sunscreen and will assess potential risk to aquatic environments

as well as the impact on public health. Their report is forthcoming this year and I encourage our legislators to await results of this important work before making policy changes that are currently poorly supported.

The current data is inconsistent and not validated amongst investigators. The most damaging influence on coral is ocean water warming. Studies implicating sunscreen have been of poor design, performed under conditions that are not real world and do not replicate actual ocean water habitats. Furthermore, beach locations with high tourist traffic do not demonstrate threatening sunscreen concentrations AND locations where coral reef degradation is high, there is minimal beach tourism. An explanation for coral reef death does not lie in sunscreen. Let's not lose sight of the bigger picture.

It is my hope, as a healer and strong proponent of skin cancer prevention, that we will look ahead toward sunscreen innovation and an unbiased assessment of current agents. It makes logical sense to await further guidance from the FDA who on September 24, 2021 (FDA Sunscreen Monograph) did not recommend any changes to currently marketed sunscreens. The NAS review will also provide much needed insight as well.

In summary, I ask that the legislature NOT pass SB 3001, or any other legislation on sunscreen ingredients until more reliable data is available.

Thank you for the opportunity to provide written testimony.

Best Regards,



Carla Nip-Sakamoto, MD
Fellow, American Academy of Dermatology
Diplomate, American Board of Dermatology
Member/Past President, Hawaii Dermatological Society
Private Practice, Queen's Physician Office Building 2
Email: cnipsakamoto@oahuderm.com

Deborah J. Yang, MD
2828 Pa'a Steet
Honolulu, HI 96817

To: Senate Committee on Agriculture and Environment

From: Deborah Yang MD, Dermatologist

Date: February 2, 2022

Time: 1:00 PM

Testimony: Written

Re: SB 3001-Relating to Environmental Protection

Position: Opposed

As a board-certified dermatologist specialized in Mohs surgery/skin cancer surgery who treats thousands of skin cancers every year, I urge you to oppose legislation that would further restrict access to sunscreen ingredients.

As dermatologists, we dedicate ourselves to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin's DNA, which can lead to skin cancer. At least one in five Americans will develop skin cancer. Melanoma, the deadliest form of skin cancer, is the second most common form of cancer in women, aged 15-29 years old. The annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion. The average annual cost of treating melanoma is approximately \$3.3 billion.

In my daily practice, I have seen the devastating effects of skin cancer. I spend countless hours educating patients on daily use of sunscreen, protective clothing, and avoidance of peak sunlight to minimize their risk of skin cancer. Both physical and chemical sunscreens have a role in daily protection from the damaging UV radiation. Please consider the broad implications of banning the use of certain sunscreens, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors would face.

The potential adverse effects related to the levels of sunscreens in the water supply and marine life are limited and have not yet been thoroughly studied. The National Academy of Sciences is conducting a review of current sunscreens' potential risk to the marine environment and the data should be presented later this year. I would encourage you to wait for these studies before taking any action to remove a product that has been proven to be effective against skin cancer.

In summary, based on current data, removing specific sunscreen ingredients and limiting products to choose from for our patients would be premature and hazardous. Please oppose any future restrictions on sunscreen ingredients. Thank you for the opportunity to provide written testimony.

Sincerely,

Deborah Yang, MD

Fellow, American College of Mohs Surgery

Diplomate, American Board of Dermatology

Member/Past President, Hawaii Dermatological Society

Email: deborahjin@gmail.com

SB-3001

Submitted on: 2/2/2022 7:54:56 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Dr. Sarah Howell	Testifying for Hawaii Dermatology & Plastic Surgery Centers	Oppose	No

Comments:

Many of my dermatology colleagues have already submitted testimony in opposed to this bill. On a whole the Hawaii dermatology society, which comprises the majority of dermatologists on the island, is opposed to this bill. Not having enough sunscreen options will expose our patients to cancerous UV rays. Skin cancer is deadly and extremely preventable. Zinc oxide and titanium dioxide do not provide enough protection for all skin types. Your bill is unintentionally racist, as you are not considering the fair skinned individuals that live in Hawaii. I have three fair skinned small children who wear sunscreen daily. They are too fair to be protected by zinc and titanium only. This is especially true when they are on the beach with water exposure or sweating a lot, which is pretty much all the time for active children in Hawaii. These physical blocker sunscreens do not stay on well in water/on wet skin. My children rely on chemical sunscreens to protect them from cancer. You Bill is putting my children at risk of death from melanoma. I firmly oppose this bill both as a mom and a dermatologist. Thank you for your consideration.

SB-3001

Submitted on: 2/2/2022 8:01:38 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Rebecca B Luria, MD	Individual	Oppose	No

Comments:

To Senator Mike Gabbard and Legislators of Hawaii:

As a board-certified dermatologist practicing on Oahu, I cut off bits of patients’ ears, faces, arms, and legs DAILY from largely **preventable**, ultraviolet radiation-induced skin cancer. **THIS IS A HUGE AND EXPENSIVE PUBLIC HEALTH PROBLEM IN OUR STATE!**

I strongly urge you to oppose legislation that would further restrict access to sunscreen ingredients. Please consider the implications of banning the use of certain sunscreens before we have a full picture of what threat they may or may not bring. I know FROM EXPERIENCE that many people WILL NOT USE fully mineral sunscreens because of their opaque white nature and sticky thick feeling. Furthermore, mineral sunscreens wash off during water play. I have seen this time and again in my own three children who come home from the beach burned despite a thick coat of zinc-based sunscreen only two hours before. Additionally, darker skin toned patients are much less likely to use a mineral sunscreen because of the white residue it leaves on the skin. This population is far more likely to die of melanoma because their tumors often go undetected until a later stage. They deserve good sun protection options as well as our fair-skinned patients.

Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer, and our state has an enormous skin cancer burden from our high UV index. The annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, and the average annual cost of treating melanoma is approximately \$3.3 billion.

The potential adverse effects related to the levels of UV-filters in the water supply and marine life are an emerging science. A recent review in the journal Environmental Toxicology and Chemistry of 12 studies concludes “there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters.” The studies evaluating 14 different organic UV filters in seawater near coral reefs determined that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers reported toxicological findings from no response to a variety of biological

effects; these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least 1000-fold higher than those reported in seawater in real life.

The National Academy of Sciences (NAS) is conducting a scientific literature review of current sunscreens' potential risk to the marine environment. The study will consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of research is necessary to understand how UV filters may affect the environment. **I encourage you to consider these ONGOING efforts before taking any action to remove a product that has been proven to be effective against skin cancer.**

Based on current data, removing specific sunscreen ingredients and products from the market would be PREMATURE AND FOOLHARDY. Doing so would deprive the public of an integral component of sun protection to decrease the risk of skin cancer. Please oppose any future restrictions on sunscreen ingredients. Thank you.

Sincerely,

Rebecca B. Luria, M.D.

Member, American Board of Dermatology

Fellow, American Academy of Dermatology

Former President of the Hawaii Dermatological Society

Practicing Dermatologist, Hawaii Dermatology and Plastic Surgery Centers in Kailua, HI

SB-3001

Submitted on: 2/2/2022 9:27:23 AM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
ryan sato	Testifying for Sato dermatology	Oppose	No

Comments:

As a board-certified dermatologist practicing in Hawaii, I urge you to oppose legislation that would further restrict access to sunscreen ingredients. Strongly consider the broad implications of banning the use of certain sunscreens, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors of Hawaii face.

As dermatologists we dedicate ourselves to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin's DNA, which is the first stage of skin cancer. Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer. Melanoma, the deadliest form of skin cancer, is the second most common form of cancer in women, aged 15-29 years old. The annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, and the average annual cost of treating melanoma is approximately \$3.3 billion.

The potential adverse effects related to the levels of UV-filters in the water supply and marine life are an emerging science. A recent review in the journal Environmental Toxicology and Chemistry of 12 studies concludes "there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters." The studies evaluating 14 different organic UV filters in seawater near coral reefs determined that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers reported toxicological findings from no response to a variety of biological effects; these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least 1000-fold higher than those reported in seawater in real life.

The National Academy of Sciences (NAS) is conducting a scientific literature review of current sunscreens' potential risk to the marine environment. The study will consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of research is necessary to understand how UV filters may affect the environment. We encourage you to consider these ongoing efforts before taking any action to remove a product that has been proven to be effective against skin cancer.

The evidenced based data on this legislation is weak at best. By banning ingredients of sunscreen, it just further restricts consumer choice along with increasing the risk of skin cancer in Hawaii. This in turn will further burden our healthcare system especially for a cancer that

could have been prevented. This legislation will only damage our keiki and families going forward.

Based on current data, removing specific sunscreen ingredients and products from the market would be premature, and hazardous. Doing so would deprive the public of an integral component of sun protection to decrease the risk of skin cancer. Please oppose any future restrictions on sunscreen ingredients. Thank you.

Sincerely,

Ryan Sato, MD