DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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Testimony of
SUZANNE D. CASE
Chairperson

Before the Senate Committees on
COMMERCE AND CONSUMER PROTECTION
and
JUDICIARY

Tuesday, March 1, 2022
10:00 AM
State Capitol, Conference Room 229 & Videoconference

In consideration of
SENATE BILL 3001, SENATE DRAFT 1
RELATING TO SUNSCREEN

Senate Bill 3001, Senate Draft 1 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 this bill.

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 octinoxate[1] was to preserve marine ecosystems. If the intent of this bill 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, avobenzone, homosalate, and octisalate.

The Department recognizes the concerns about the presence of avobenzone 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]

Avobenzone has been shown to cause toxicity to the light-reactions of photosynthesis which can cause corals to bleach. Avobenzone 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]

Octisalate has displayed multiple hormonal disrupting activities with in vitro lab studies. In addition, disruption of mitochondrial membrane function, and possible apoptosis (programed cell death) was found. No coral toxicity studies were found for homosalate, but this chemical has been readily found in reef waters. Lab based studies have shown hormone-receptor disrupting activities in in-vitro assays. Lethal and sublethal effects were found when the marine algae (*Tetraselmis* sp.) was exposed to homosalate, indicating potential impacts to phytoplankton communities[5]. This highlights concerns that it could affect corals and suggests the need for testing for these potential the effects. Both homosalate and octisalate are teratogens, which are known to cause embryonic development defects in mammals, fish, and larvae.

As a result of these recent scientific findings, we feel that prohibiting the sale of products containing octocrylene, avobenzone, homosalate, or octisalate would likely benefit the health and

[1] Act 104 (SLH 2018) established section 342D-21, which prohibits the sale or distribution of sunscreen that contains oxybenzone or octinoxate.
[2] Downs, Craig A., personal communication (2021)
[3] Fel et al. (2019), Lozano et al. (2020), Giraldo et al. (2017), Boyd et al. (2021), Yan et al. (2020), Zhang et al (2016), Campos et al. (2017), Gago-Ferrero et al. (2013), Cocci et al. (2020),Bluthgen et al. (2014)
[4] Fel et al. (2020), Boyd et al. (2021), Klopcic and Delenc (2017), Lozano et al. (2020), Ahn et al (2019), Yang et al. (2018)
[5] Thorel et al. (2020)

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 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 Hawai‘i’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

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Zhang, Qiuya Y., et al (2016), Assessment of multiple hormone activities of a UV-filter (octocrylene) in zebrafish (*Danio rerio*), http://dx.doi.org/10.1016/j.chemosphere.2016.06.037

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DAVID Y. IGE
GOVERNOR OF HAWAII

ELIZABETH A. CHAR M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
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Testimony COMMENTING on SB3001-SD1
RELATING TO SUNSCREEN

SENATOR ROSALYN BAKER, CHAIR
SENATE COMMITTEE ON COMMERCE & CONSUMER PROTECTION

SENATOR KARL RHOADS, CHAIR
SEANTE COMMITTEE ON JUDICIARY

Hearing Date: 3/1/2022 Room Number: 229/videoconference

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

Department Testimony: SB3001-SD1 seeks to amend HRS 342D to require that sunscreens sold or distributed in Hawaii only contain active ingredients classified by the United States Food and Drug Administration (FDA) as Category 1: *Generally Recognized as Safe and Effective.* The Department has the following comments.

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

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

Under the FDA's proposed update, the only FDA Category 1 active ingredients in sunscreens would be zinc oxide and titanium dioxide, both of which are mineral sunscreens. Of the remaining fourteen approved ingredients, twelve would be classified as Category 3 – *insufficient evidence to determine if they are safe and effective* and two as Category 2 – *Not safe or effective*. This change by FDA that would update the GRASE list is still in the proposal stage and cannot become effective for at least 1 year after finalizing. The current GRASE list in effect until FDA's update is finalized lists all 16 sunscreen ingredients.

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

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

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

Offered Amendments: None

Thank you for the opportunity to testify on this measure.

REBECCA VILLEGAS
Council Member
District 7, Central Kona

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

HAWAIʻI COUNTY COUNCIL

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

February 28, 2022
TESTIMONY OF REBECCA VILLEGAS
COUNCIL MEMBER, HAWAIʻI COUNTY COUNCIL
ON SB 3001 SD1, RELATING TO SUNSCREEN
Committee on Consumer Protection and Commerce
Committee on Judiciary
Tuesday, March 1, 2022 at 10:00am

Aloha Chair Baker, Chair Rhoads and Members of the Committees:

My testimony is submitted in my individual capacity as a member of the Hawaiʻi County Council and Chair of the Hawaiʻi County Council Climate Resilience and Natural Resource Management Committee.

We strongly support SB3001 SD1 which requires beginning January 1, 2023, it 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.

A number of sunscreens have recently demonstrated to pose intolerable toxicologic threats such as; environmental contamination in coastal waters, harmful impacts on Hawaiʻi's marine environment, coral reefs, and other residing ecosystems, increases the risk of breast cancer, birth defects, developmental disorders in children, and other issues. The State in the interest to preserve our marine ecosystem has banned sunscreen that contain oxybenzone or octinoxate through the enactment of Act 105, session laws of Hawaiʻi 2018. Additional action must be taken to prevent any potential harmful impacts of sunscreens containing ingredients other than what is listed as category I. The ocean is our #1 tourist destination, our playground, our icebox, and our solace. We must find solutions to protect the State's economy, health, environment, and our way of life for our residents.

For the reasons stated above I urge the Committee on Consumer Protection and Commerce and the Committee on Judiciary to support this measure as well. Should you have any questions, please feel free to contact me at (808) 323-4267.

Mahalo for your consideration.

Rebecca Villegas
Council Member, Hawaiʻi County Council

February 25, 2022

TO:
Senator Rosalyn Baker, Chair
Senator Stanley Chang, Vice Chair
Members of the Senate Committee on Commerce and Consumer Protection

Senator Karl Rhoads, Chair
Senator Jarrett Keohokalole, Vice Chair
Members of the Senate Committee on Judiciary

Thirty First Legislature
Regular Session of 2022

FROM:
The members of the Hawaii Skin Cancer Coalition

RE: OPPOSITION to Senate Bill 3001, SD 1, – RELATING TO SUNSCREENS

Dear Chair Gabbard, Vice Chair Nishihara, and Members of the Committee,
the members of the Hawaii Skin Cancer Coalition strongly oppose SB 3001, SD1.

The Hawaii state law signed in July 2018 eliminated the over the counter (OTC) sale of the ingredients oxybenzone and octinoxate. SB 3001, SD1 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.

The guidance from the Food and Drug Administration (FDA cited in this bill has been misinterpreted. It is inaccurate to state that the FDA has labeled current sunscreen ingredients as not safe. What the FDA has done is issue a proposed rule, which asks manufacturers to provide more data about the safety of several sunscreen ingredients. The FDA is asking for more safety data to find out the following:

• To what extent your skin absorbs sunscreen ingredients

• Whether absorbing sunscreen has any effects on your skin or body

The FDA proposed rule only classifies that two ingredients are not "generally recognized as safe and effective" (GRASE):

• Para-aminobenzoic acid (PABA)

• Tolamine salicylate

However neither of these ingredients in sunscreen are legally sold in the United States. The FDA proposed rule also classifies two ingredients that are "generally recognized as safe and effective" (GRASE). These ingredients are:

- Titanium dioxide
- Zinc oxide

However, the GRASE determination only considers the effects on humans, it does not consider the effects of these ingredients in the marine environment. In other words, it is not known whether these ingredients (titanium and zinc oxide sunscreens) can harm marine life or corals. Some current research has suggested that these ingredients do have the potential to harm marine life including corals. The FDA is calling for more safety data on the following 12 ingredients before determining whether these ingredients can be classified as GRASE:

•Those commonly used in the U.S. include: ensulizole, octisalate, homosalate, octocrylene, octinoxate, oxybenzone, avobenzone.

•Those commonly not used in the U.S.: Cinoxate, dioxybenzone, meradimate, padimate O, sulisobenzone.

While the FDA is asking for more data, it does not say that these ingredients are unsafe. It does not ask the public to stop using sunscreens that contain any of these ingredients. We at the Hawaii Skin Cancer Coalition and in recognition of the American Academy of Dermatology Association (AADA) and the Hawaii Dermatological Society (HDS) recommendations to help prevent skin cancer suggest, "That a comprehensive sun protection plan that includes seeking shade; wearing protective clothing, including hats and sunglasses; and generously applying a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher to exposed skin. Those who are concerned about the reported effects of chemical sunscreen ingredients can opt for a physical sunscreen containing the active ingredients zinc oxide or titanium dioxide." We believe these actions can help prevent skin cancers and protect our marine environment.

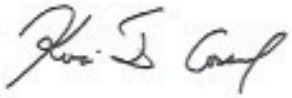
Morbidity and deaths from skin cancers are on the rise in the U.S. and Hawaii. The current focus of Hawaii's legislative policy limiting the sale of sunscreen products will undermine years of progress

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 are treated for skin cancers in the U.S. and at the cost of over 8 billion dollars to our U.S. healthcare 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 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, SD1 (SB 3001, SD1) and ask that you defer this bill 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 Hawaii Cancer Center, the American Cancer Society, Hawaii Pathologists' Laboratory, the Friends of the University of Hawaii Cancer Center, the Hawaii Dermatological Society, Kaiser Permanente, Kuakini Health System, Queen's Healthcare Plan, and the Hawaii Ophthalmological Society.
All of these organizations share a common goal to help prevent skin cancer.

SB-3001-SD-1
Submitted on: 2/26/2022 8:04:59 PM
Testimony for CPN on 3/1/2022 10:00:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ted Bohlen	Testifying for Hawai‘i Reef and Ocean Coalition	Oppose	Yes

Comments:

To: The Honorable Rosalyn Baker, Chair, the Honorable Stanley Chang, Vice Chair, and members of the Senate Commerce and Consumer Protection Committee, and

The Honorable Karl Rhoads, Chair, The Honorable Jarrett Keohokalole, Vice Chair, and Members of the Senate Committee on Judiciary

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

Re: Hearing SB3001 SD1 RELATING TO SUNSCREEN. Tuesday March 1, 2022, 10:00 a.m., by videoconference

Aloha Chairs Baker and Rhoads, Vice Chairs Chang and Keohokalole, and members of the Senate Committees on Commerce and Consumer Protection and Judiciary:

Position: **Hawai‘i Reef and Ocean Coalition OPPOSES SB3001 SD1!**

The Hawai‘i Reef and Ocean Coalition (HIROC) is very concerned about protecting coral reefs and other marine life from harmful effects of certain chemical sunscreens. HIROC appreciates the bill's intent to protect the public health by prohibiting sales of sunscreens not generally recognized as safe and effective (GRASE) by the FDA; the public health is very important!

However, the environment is also very important! FDA decisions on GRASE are based on human health findings, not the environment. What the FDA may do on GRASE is uncertain. **This bill's approach is not appropriate at this time because it does not ensure protection of the marine environment, coral reefs and marine species. HIROC asks the Committee to please hold this bill!**

Mahalo!

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

ADA HAWAI'I
AMERICANS FOR DEMOCRATIC ACTION

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MAILING ADDRESS
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Honolulu
Hawaii 96823

February 27, 2022

TO: Chairs Baker and Rhoads & Members of CPN/JDC Committees

RE: SB 3001 SD1 Relating to Sunscreen

Support for a Hearing on March 1

Americans for Democratic Action is an organization founded in the 1950s by leading supporters of the New Deal and led by Patsy Mink in the 1970s. We are devoted to the promotion of progressive public policies.

Americans for Democratic Action Hawaii supports this bill as it would prohibit the sale and distribution of sunscreen with 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.

Thank you for your consideration.

Sincerely,

John Bickel, President

TESTIMONY OF TINA YAMAKI, PRESIDENT
RETAIL MERCHANTS OF HAWAII
MARCH 1, 2022
SB 3001 SD1 Relating to Sunscreen

Good morning, Chairperson Baker and Chairperson Rhoads and members of Senate Committee on Commerce and Consumer Affairs and the Senate Committee on Judiciary. 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 SD1 Relating to Sunscreen. This measure prohibits, beginning 1/1/2023, 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. Effective 1/1/2050.

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

3610 Waialae Ave • Honolulu, HI 96816 (808) 592-4200 tyamaki@rmhawaii.org

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

To: The Honorable Rosalyn Baker, Chair, the Honorable Stanley Chang, Vice Chair, and members of the Senate Commerce and Consumer Protection Committee; and

The Honorable Karl Rhoads, Chair, The Honorable Jarrett Keohokalole, Vice Chair, and Members of the Senate Committee on Judiciary

Re: Hearing SB3001 SD1 RELATING TO SUNSCREEN.

Tuesday March 1, 2022, 10:00 a.m., by videoconference

Aloha Chairs Baker and Rhoads, Vice Chairs Chang and Keohokalole, and members of the Senate Committees on Commerce and Consumer Protection and Judiciary:

Position: **Friends of Hanauma Bay OPPOSES SB30001 SD1!**

Friends of Hanauma Bay is very concerned about protecting coral reefs and other marine life from harmful effects of certain chemical sunscreens.

Public health is also very important, so we appreciate the bill's intent to protect the public health by prohibiting sales of sunscreens not generally recognized as safe and effective (GRASE) by the FDA.

Simce FDA decisions on GRASE are based only on human health findings, this bill's approach is not appropriate at this time because it does not ensure protection of the marine environment, coral reefs and marine species.

We therefore urge the Committees to defer this bill.

With Aloha

Lisa Bishop
President

PO BOX 25761, Honolulu, Hawaii 96825-0761 * website: www.friendsofhanaumabay.org * email: info@friendsofhanaumabay.org
Friends of Hanauma Bay is a Section 501(c)(3) not-for-profit charitable organization
Federal Tax Identification Number 99-0285649

Personal Care Products Council
Committed to Safety, Quality & Innovation

February 28, 2022

Senator Rosalyn H. Baker, Chair
Senator Stanley Chang, Vice Chair
Hawai'i Senate Committee on Commerce and Consumer Protection

Senator Karl Rhoads, Chair
Senator Jarrett Keohokalole, Vice Chair
Hawai'i Senate Committee on Judiciary

RE: Opposition to SB 3001 SD1 (Gabbard)

Chairs Baker and Rhoads and Vice Chairs Chang and Keohokalole:

On behalf of the members of the Personal Care Products Council (PCPC),[1] I am writing to express our opposition to SB 3001 SD1, 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, distributers 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 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 SD1. 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.

SB-3001-SD-1
Submitted on: 2/28/2022 7:29:05 AM
Testimony for CPN on 3/1/2022 10:00:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Cynthia Punihaole Kennedy	Testifying for The Kohala Center	Oppose	No

Comments:

Aloha Honorable Rosalyn Baker, Chair, the Honorable Stanley Chang, Vice-Chair, and members of the Senate Commerce and Consumer Protection Committee, and

The Honorable Karl Rhoads, Chair, The Honorable Jarrett Keohokalole, Vice-Chair, and Members of the Senate Committee on Judiciary

Although SB3001 SD1 would ban sales of sunscreens not generally recognized as safe and effective (GRASE) by the FDA to protect human health; it does not address the importance of protecting the coral reef and marine life. FDA decisions on GRASE are based on human health findings.

Coral reefs are intrinsic to Hawaiian culture and provide critical natural protection against coastal erosion and sea-level rise. Further, our coral reefs underpin our vibrant tourism industry, Hawai‘i’s primary and vital economic engine. This is a grave concern because it has been reported in the scientific literature that specific petrochemicals in sunscreen can have irreversibly detrimental effects on marine life, including changes in fish behavior, damage to coral DNA and larvae, and the health of algae, fish, shellfish, urchins, and marine mammals.

This bill does not safeguard the protection of the coral reef and marine life.

We ask you to please defer SB 3001 SD1.

TO:
Senate Committee on Commerce & Consumer Protection
Senator Rosalyn Baker, Chair
Senator Stanley Chang, Vice Chair

Senate Judiciary Committee
Senator Karl Rhoads, Chair
Senator Jarrett Keohokalole, Vice Chair

FROM: Lynn Miyahira representing Public Access to SunScreens (PASS) Coalition
DATE: Tuesday, March 1, 2022
TIME: 10:00 AM
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.

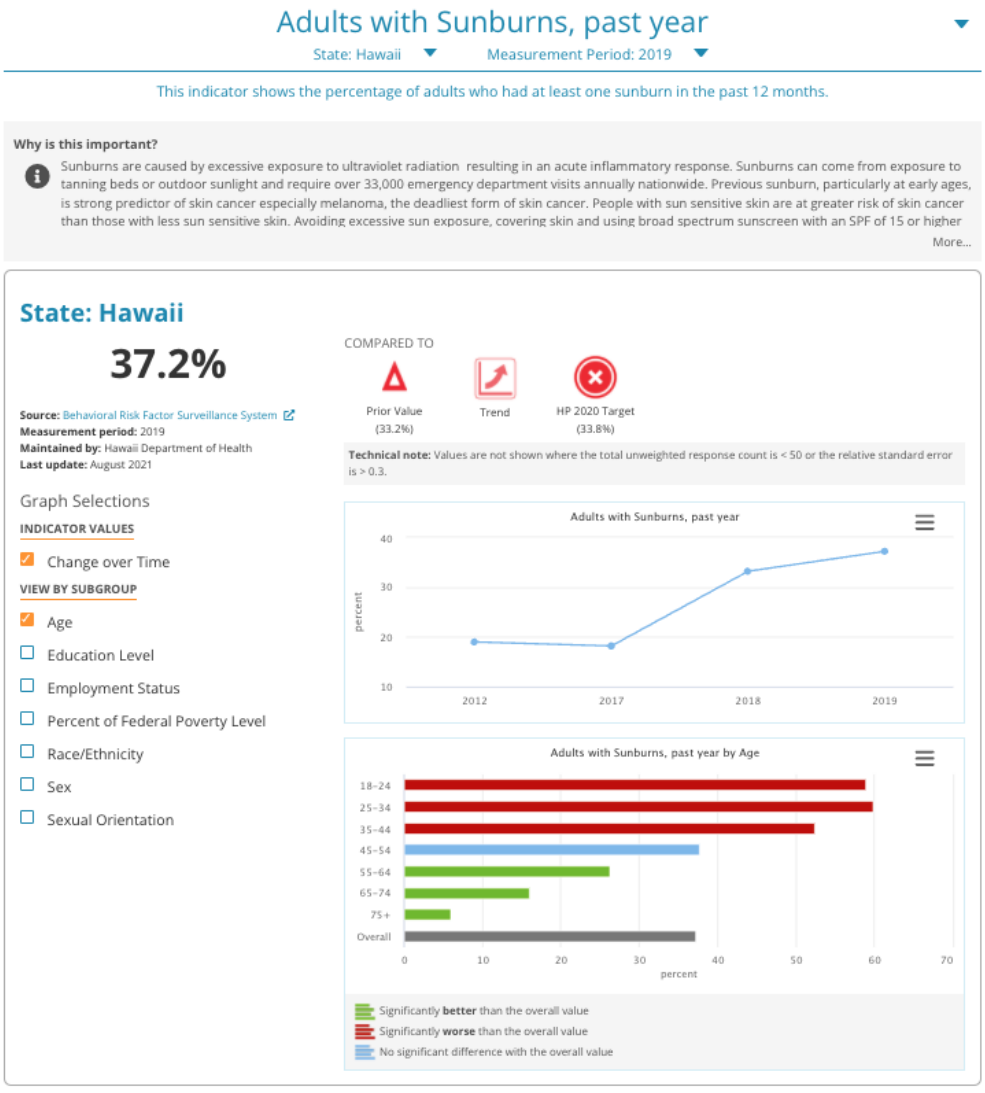
Hawaii Residents Are at Higher Risk for Skin Cancer

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 average[i]
- Researchers have found that just *one* blistering sunburn in childhood or adolescence more than doubles a person's chance of developing melanoma later in life[ii]

- 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]
- **According to the DOH's Hawaii Health Matters dashboard, the number of adults in Hawaii reporting having at least one sunburn in the past 12 months has almost doubled since 2017.**[vi] This data shows how stigmatizing the use of sunscreens has caused a decline in sun-safe behaviors – and having just five or more sunburns in your lifetime is known to double your risk for melanoma.[vii]

Table 1: Adults with at least one sunburn in the last 12 months
Source: Hawaii Health Matters, Department of Health



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.[viii]

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.

Additionally, Dr. Ku'ulei Rodgers, principal investigator at the UH Coral Reef Ecology Lab, was asked by the Star-Advertiser about sunscreen threats at Hanauma Bay. In an article on Nov 20, 2021, she was quoted saying that "There is no strong evidence to state sunscreens threaten coral reefs." She goes on to say, "Our coral reef ecology lab has not seen the effects of sunscreen use on bleaching in our monitoring efforts. If there were effects from sunscreen it would be evident."[ix] Dr. Rodgers and her team have been studying Hanauma Bay for over 20 years and we can be sure that if sunscreen was a major threat to corals, they would see it in their research. Please see the attached article.

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.[x] Other causes include land-based source pollution, water quality issues due to poor wastewater management, sedimentation and excess nutrification.[xi] 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."[xii]

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[xiii] 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[xiv]" 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."[xv]

The Hawaii state law signed in July 2018 already eliminated the OTC sale of the ingredients oxybenzone and octinoxate. **SB 3001 attempts to 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

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[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] http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=3029&localeId=14
[vii] https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/
[viii] https://www.sciencedirect.com/science/article/pii/S0048969719310125?via%3Dihub
[ix] https://www.staradvertiser.com/2021/11/20/hawaii-news/sunscreen-chemicals-still-found-at-hanauma-study-says/
[x] https://www.nature.com/articles/nature21707

[xi] https://www.epa.gov/coral-reefs/threats-coral-reefs

[xii] https://www.nationalacademies.org/our-work/environmental-impact-of-currently-marketed-sunscreens-and-potential-human-impacts-of-changes-in-sunscreen-usage

[xiii] https://www.accessdata.fda.gov/scripts/cder/omuf/index.cfm?event=NewMonograph&ID=D1D673977F06B1486C355A8162942E5B9CC2734AE65E4585CB6C013EDD5B03F3&OMUFID=OTC000006

[xiv] https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption

[xv] https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption

HDS
Hawaii Dermatological Society

LATE

February 28, 2022

The Honorable Rosalyn H. Baker, Chair
Senate Committee on Commerce and Consumer Protection
The Honorable Karl Rhoads, Chair
Senate Committee on Judiciary
State Capitol Room 229
Honolulu, HI 96813

Dear Chairs Baker and Rhoads:

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

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about the safety of chemical sunscreens containing avobenzone, ensulizole, homosalate, 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 2022, 530 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]

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[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.naaccr.org/. (Accessed on 3-10-2016).
[7] American Cancer Society. Cancer Facts and Figures 2022. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2022/2022-cancer-facts-and-figures.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."

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[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

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

TO: Senate Committee on Commerce and Consumer Protection
Senator Rosalyn H. Baker, Chair
Senator Stanley Chang, Vice Chair
Senate Committee on Judiciary
Senator Karl Rhoads, Chair
Senator Jarrett Keohokalole, Vice Chair

FROM: Carla Nip-Sakamoto MD, Dermatologist

DATE: Tuesday, March 1, 2022
TIME: 10:00 a.m.
TESTIMONY: Written

RE: SB 3001, SD1 – Relating to Sunscreen

Position: Opposed

As a board-certified 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. Skin cancer does not discriminate; all skin colors are at risk.

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, sulisobenzone, 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.

According to the Department of Health's Hawaii Health Matters data dashboard, the number of adults reporting at least one sunburn in the last 12 months doubled since 2017, from 18.2% to 37.2 % between 2017 and 2019. In 2018, during that interval, Hawaii passed a ban on sunscreen ingredients oxybenzone and octinoxate. Further depletion of sunscreen options will increase the risk of sunburn which we know is a risk factor for skin cancer.

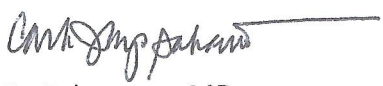
The current data on sunscreen and coral reef degradation is inconsistent and not validated amongst investigators. The most damaging influence on coral is ocean water warming. Studies implicating sunscreen have been of poor design, performed under conditions that are not real world and do not replicate 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 us 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 urge the legislature NOT pass HB 1519, or any other legislation on sunscreen ingredients until more reliable data is available.

Thank you for the opportunity to provide written testimony.

Respectfully Submitted,



Carla Nip-Sakamoto, MD
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Diplomate, American Board of Dermatology
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Private Practice, Queen's Physician Office Building 2

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Deputy Director of Council Services
David M. Raatz, Jr., Esq.

COUNTY COUNCIL

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February 28, 2022

TO: Committee on Commerce and Consumer Protection
Senator Rosalyn H. Baker, Chair
Senator Stanley Chang, Vice Chair

Committee on Judiciary
Senator Karl Rhoads, Chair
Senator Jarrett Keohokalole, Vice Chair

FROM: Kelly Takaya King, Maui County Councilmember

HEARING: March 1, 2022 at 10:00 a.m., Senate Conference Room 229 & Videoconference

SUBJECT: **Comments on SB3001 SD1 RELATING TO SUNSCREEN**

Dear Honorable Chairs Baker and Rhoads, Vice Chairs Change and Keohokalole, and Committee Members,

Although I previously testified in support of SB3001 SD1, I have concerns with this legislation as currently proposed. After much discussion with environmental sector colleagues from various organizations in Hawaii, we agree that what we hoped would be a bill to protect our coral reefs and marine species and habitat has an unclear intent. The reliance on FDA standards and GRASE classifications place the focus on human health studies instead of the detriment chemical-based sunscreens have on Hawaii's precious marine ecosystem.

Extensive scientific reports currently show that the only active ingredients in sunscreen that are safe for the environment are minerals, namely titanium dioxide and zinc oxide. The bill we recently passed in Maui County is consistent with that evidence. SB3001 SD1 does not seem to address the foremost need to protect our reefs, and I therefore urge you to defer the bill at this time.

Mahalo nui loa,

Kelly T. King

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

SB-3001-SD-1
Submitted on: 2/28/2022 7:19:22 AM
Testimony for CPN on 3/1/2022 10:00:00 AM

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 non-melanoma 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. In particular, many patients state that the reason for not wearing sunscreen was the fact that the zinc sunscreens were too thick and turned their skin white. As a mother of two young, outdoorsy children, I have serious concerns that a premature ban of the majority of our sunscreens will reduce options and dangerously heighten the risk of our keiki developing sun damage and skin cancers that could have otherwise been easily prevented.

I was born and raised in these islands, and I have a deep appreciation of Hawaii's beautiful ocean ecosystem. I agree with doing everything we can in order to preserve nature, but such decisions should be based on reputable and reproducible science, which I feel is not yet available. I have witnessed repeatedly the physical and mental toll of skin cancers upon members of our community, and I would like to prevent our kama'aina and visitors from suffering from these largely preventable diseases.

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

HAWAII FOOD INDUSTRY ASSOCIATION

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TO:
Committee on Commerce and Consumer Protection
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LATE

FROM: HAWAII FOOD INDUSTRY ASSOCIATION
Lauren Zirbel, Executive Director

DATE: March 1, 2022
TIME: 10am
PLACE: Via Videoconference

RE: SB3001 SD1 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]**

1 https://www.fda.gov/media/124654/download#:~:text=Sunscreen%20active%20ingredient%20safety%20and%20e%20ectiveness&text=FDA%20proposes%20that%20it%20needs,sulisobenzone%2C%20oxybenzone%2C%20avobenzone).

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 heath, 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 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/heathy-people-healthy-places-include-sunscreen/

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LATE

March 1, 2022

To: Committee on Commerce and Consumer Protection
The Honorable Rosalyn H. Baker, Chair
The Honorable Stanley Chang, Vice Chair

Committee on Judiciary
The Honorable Karl Rhoads, Chair
The Honorable Jarrett Keohokalole, Vice Chair

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

RE: SB 3001, SD 1 Relating to Sunscreens - OPPOSE

Dear Chairs Baker and Rhoads,

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, SD1 – 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.[i] 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 include additional sunscreen ingredients increases the risk of skin cancer for Hawaiians and visitors to the state.

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. For these reasons, we oppose passage of SB 3001, HD1.

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.

Respectfully submitted,

Carlos I. Gutierrez
Vice President, State & Local Government Affairs
Consumer Healthcare Products Association
cgutierrez@chpa.org | 202-429-3521

[i] 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

SB-3001-SD-1
Submitted on: 3/1/2022 8:38:52 AM
Testimony for CPN on 3/1/2022 10:00:00 AM

LATE

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Jeff Bagshaw	Individual	Support	No

Comments:

I am in support of SB 3001 which works toward protecting our environment against petrochemical sunscreen products, strengthening already existing state law which prohibits two compounds. This bill goes beyond those two prohibited substances, preparing for inevitable industry re-formulations and new patent names for essentially the same chemical compounds.

While using the definition of GRASE (generally recognized as safe and effective) is a good standard, it only addresses recommendations set forth by the FDA. Unfortunately, FDA standards can be altered by changing federal administrations and while that agency is tasked with addressing human health concerns, it does not have authority to address environmental issues. With the enactment of the previous state-wide ban on oxybenzone and octinoxate, sunscreen manufacturers re-tooled their marketing to falsely claim their products were "reef safe." Defining sunscreen as a product intended to prevent sunburn may leave the door open for manufacturers to re-label products to skirt this definition.

For those reasons SB 3001 could be much stronger if it specified that only products with minerals (zinc and or titanium) as active ingredients could be sold and used, and if the definitions were broadened to include products claiming to be "sun-care" or to prevent not only sunburn but sun damage.

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 form 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 Francisana 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.

Unfortunately, the forthcoming NSA report to the FDA will focus only on the effects of these chemicals to those who directly apply the products, it will 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.

Petrochemical sunscreen products began to be widely marketed in the mid-1970s. Prior to that, people relied on mineral sun-blocks and clothing. The American Cancer Society reports that from 1975-2017 rates of melanoma in the US went from 8 in 100,000 to over 30 in 100,000, a more than three-fold increase. If these products are so essential and effective in preventing skin cancer, why has there been this increase instead of a decrease? Retailers who are flexible and who place a higher value on public and environmental health rather than sales have already begun to carry mineral sun-blocks and protective clothing, preserving their profits.

The NAS is not a regulatory agency, it will only make recommendations to the FDA. 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.

I applaud the Agricultural Committee's efforts in making Hawai‘i proactive in protecting the health of our people and our food resources from our environment.

Mahalo,

Jeff Bagshaw

Volunteer Coordinator, Information and Education Associate

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