## Climate Action, Resilience, and Environment Committee on 2021-10-20 9:00 AM - End time: 10:25 a.m.

Meeting Time: 10-20-21 09:00

### eComments Report

Meetings	Meeting Time	Agenda Items	Comments	Support	Oppose	Neutral
Climate Action, Resilience, and Environment Committee on 2021-10-20 9:00 AM - End time: 10:25 a.m.	10-20-21 09:00	2	6	5	0	0

#### Sentiments for All Meetings

The following graphs display sentiments for comments that have location data. Only locations of users who have commented will be shown.

#### **Overall Sentiment**



# Climate Action, Resilience, and Environment Committee on 2021-10-20 9:00 AM - End time: 10:25 a.m. 10-20-21 09:00

Agenda Name	Comments	Support	Oppose	Neutral
AGENDA	3	3	0	0
CARE-54 CC 21-305 SUNSCREEN (CARE-54)	3	2	0	0

#### Sentiments for All Agenda Items

The following graphs display sentiments for comments that have location data. Only locations of users who have commented will be shown.

**Overall Sentiment** 



Agenda Item: eComments for A G E N D A

#### **Overall Sentiment**



Shelby Serra Location: Submitted At: 8:23am 10-20-21 Climate Action, Resilience, and Environment Committee October 20, 2021 CARE-54 CC 21-305

Aloha Committee,

My name is Shelby Serra and I am testifying today on behalf of Pacific Whale Foundation, whose mission is to protect the ocean through science and advocacy, and to inspire environmental stewardship.

I am testifying on agenda item CC 21-305.

Coral reefs are among the most biologically diverse ecosystems in the world, supporting nearly one million species of algae, invertebrates, and fish. Research has shown that some chemicals commonly found in sunscreen can damage coral reefs by disrupting coral reproduction, inhibiting growth, deforming coral DNA, and increasing the rate of zooxanthellae viruses and coral bleaching.

It has been revealed that adjustments in single polymers in a chemical compound can yield a new compound with similar impacts to the ecosystem, however the change in name can exempt it from law. By this logic, implementing a law that allows only mineral-based sunscreens strengthens the intent of the legislation, and disallows manufactures from finding loopholes by adjusting their chemical compounds slightly.

There are two kinds of sunscreen- chemical and physical (also called mineral). Chemical sunscreens are most common, and work by absorbing UV rays, while physical sunscreens create a barrier on your skin and reflect the UV rays.

The science is clear that many of the elements in chemical sunscreens are harmful to coral and other marine life.

According to the 2020 Hawai'i Ocean Resources Management Plan as well as the Hawai'i Tourism Authority, around 10 million people visit Hawai'i every year. Of this, it is reported that 80% of visitors take part in marine activities.

We must take swift action and take a different approach to sunscreen prohibitions to ensure that we do not continue to add reef damaging chemicals into our waters day after day.

Mahalo for your time Shelby Serra Pacific Whale Foundation

#### **Guest User**

Location: Submitted At: 5:08pm 10-19-21 I'm testifying in support of CARE 54, which would prohibit the sale, use or distribution of non-mineral sunscreens.

The state of Hawaii made worldwide news with our law that banned the sale of sunscreen products containing oxybenzone and octinoxate. However, we can't stop there. Sunscreen manufacturers have been quick to use other chemicals – some untested as far as their impacts on corals and marine life go – to create new products which they labeled as "reef safe."

There are sufficient questions regarding how these products impact human health and our coral reefs. For example, avobenzone, which is often used in place of oxybenzone, works in a similar manner and is believed to pose similar risks to coral DNA and aquatic life exposed to this chemical.

There are also questions about how these chemicals act upon the environment when used in combination with other sunscreen chemicals. We believe it is best to legalize only those sunscreen ingredients that are recognized as safe for our reefs. Given the volume of sunscreen chemicals washed off into our coral reef areas each year, it is best to follow the precautionary principle and avoid chemicals that are suspected of causing harm to corals and marine wildlife.

Of all the sunscreen chemicals in use, the FDA has only declared titanium dioxide and zinc oxide as safe for humans. Why should we take the risk of allowing other questionable sunscreen chemicals to cause harm to people and to our reefs?

Mahalo for supporting this bill. Anne Rillero Maui Nui Marine Resource Council

Guest User Location:

#### Submitted At: 10:32pm 10-18-21

Hawai\_i Wildlife Fund is in strong support of this bill to allow only mineral-based sunscreens to be used in Maui Marine Life Conservation Districts. We worked hard for the bans on oxybenzone and octinoxate previously, but there are many more chemicals that should also be banned from sunscreens. Mahalo for this cutting edge legislation. Hannah Bernard

Agenda Item: eComments for CARE-54 CC 21-305 SUNSCREEN (CARE-54)

#### **Overall Sentiment**



#### Guest User Location: Submitted At: 8:33am 10-20-21

From: Larry Stevens <lfstevens@earthlink.net> Sent: Wednesday, October 20, 2021 8:17 AM To: County Clerk <County.Clerk@mauicounty.us> Subject: Sunscreen testimony

October 19, 2021

Dear Council Member Kelly King and Members of the Maui CARES committee,

My name is Larry Stevens and I'm here to testify on behalf of Maui Nui Marine Resource Council in support of CARE 54, which would prohibit the sale, use or distribution of non-mineral sunscreens.

In 2008, it was estimated that 25% of sunscreen applied to the skin is washed off within 20 minutes of submersion, releasing approximately 4,000–6,000 tons/year into the surrounding coral reefs (Danovaro et al., 2008). According to Hawaii's DLNR, 55 gallons of sunscreen go into our nearshore waters each day on Maui. Rather than being evenly distributed, much of that sunscreen is concentrated at popular diving, swimming and snorkeling sites.

The pollution doesn't occur just at the beach. Hawaii's wastewater treatment facilities do not have effective means to filter out these organic compounds, leading to sewage contamination of coastal waters (Ramos, Homem, Alves, & Santos, 2015). By failing to remove these compounds, the pollutants can accumulate and affect marine organisms.

The FDA is currently evaluating the safety of 10 chemical sunscreen ingredients on human health. These 10 ingredients or UV filters are cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, padimate O, sulisobenzone, and avobenzone. Besides oxybenzone, studies have found that octinoxate, homosalate, octisalate, octocrylene and avobenzone are absorbed into the bloodstream.

Sunscreens can contain up to 20 or more of these chemical compounds because no single compound on its own, at permitted concentrations, provides sufficient protection against UV radiation (Danovaro et al. 2008). It is not known how the combination of these chemicals impacts human health, corals or marine wildlife.

Researchers have found that common ingredients from paraben, cinnamate, benzophenone, and camphor derivatives can stimulate dormant viral infections in the zooxanthellae, the beneficial algae that live within corals.(Tibbetts 2008). These chemicals caused viruses within zooxanthellae to replicate until their algal hosts exploded, spilling viruses into the surrounding water, which could infect nearby coral colonies.

Another study addressed the impact of 5 UV filters found in sunscreen including benzophenone, cinnamate, octocrylene, homosalate, and a camphor compound. The found varying levels of toxicity, but most filters affected marine bacteria. These bacteria are important for larger marine organisms, such as corals, algae, and fish.

To protect corals, marine organism and human health, Maui Nui Marine Resource Council supports CARE 54, and asks that the Maui County Council bring this to your agenda, for consideration and passage.

Larry

Guest User Location: Submitted At: 7:59am 10-20-21 October 20, 2021

Dear Council Member Kelly King and Members of the Maui CARES committee,

My name is Jill Wirt and I'm also here to testify on behalf of Maui Nui Marine Resource Council in support of CARE 54, which would prohibit the sale, use or distribution of non-mineral sunscreens.

We supported the statewide ban on the sale of sunscreens containing oxybenzone and octinoxate, two chemicals known to cause developing corals to bleach, baby corals to die, and lead to genetic damage in corals and other organisms. In corals, DNA damage can cause failure to reproduce, fatal larval deformities, and reduce the ability to heal from wounds and resist diseases in corals. Both chemicals can increase reproductive diseases in creatures from sea urchins to parrotfish and mammal species similar to the Hawaiian monk seal. In addition, this compound is herbicidal in property, which can be toxic to algae and marine plants as low as 10 parts per trillion, killing limu.

As we've all noted, since the ban, there is a serious lack of regulation regarding the marketing of sunscreens. One study looked at different "reef safe" and "reef friendly" marketed sunscreens, and found that in one-fifth of the surveyed sunscreens, a range of 9 different chemical compounds were used. In 92% of the products, avobenzone, homosalate, and octisalate were present as active ingredients (Miller et al. 2021).

These combinations of chemicals have not been adequately studied to understand their impact on the reefs, fish, invertebrates and marine wildlife. Sunscreens can contain up to 20 or more of these chemical compounds because no single compound on its own, at permitted concentrations, provides sufficient protection against UV radiation.

In fact, the FDA is just beginning to evaluate the impacts of 10 common sunscreen chemicals on human health.

The nation of Palau in the western Pacific Ocean and Thailand have also enacted bans on sunscreen chemicals, though they went further than only prohibiting oxybenzone and octinoxate.

Palau banned 10 chemicals (oxybenzone, octinoxate, octocrylene, 4-methyl-benzylidene camphor, triclosan, methyl paragon, ethyl paragon, butyl paragon, benzyl paragon, and phenoxyethanol) to protect its pristine environment. Their ban took effect in 2020.

Thailand enacted a ban this August which prohibits the bringing of and use of sunscreen containing any of the

following four chemicals into Thailand's national parks: Oxybenzone (Benzophenone-3, BP-3), Octinoxate (Ethylhexyl methoxycinnamate), 4-Methylbenzylid Camphor (4MBC) and Butylparaben.

Given the fragile state of our coral reefs, and the many threats posed by sea level rise, warming ocean waters and sediment runoff, we urge the precautionary approach, to ban the sale and use of all non-mineral sunscreens in Maui County at this time. That's why Maui Nui Marine Resource Council supports CARE 54, and asks that the Maui County Council bring this to your agenda, for consideration and passage.

#### Guest User

Location: Submitted At: 7:50am 10-20-21

Aloha County Council members of the Climate Action, Resilience and Environment Committee:

I am in full support of your efforts to ban the sale, distribution and use of sun-protection products with ANY active ingredients other than naturally-occurring minerals such as zinc or titanium.

I have testified on this issue several times before and other more learned speakers can discuss the data that emphasizes how dangerous the chemical sunscreen compounds today being marketed as "reef safe" really are to both our environment and our bodies. Today I can offer my 34 years of experience in Hawai'i directly working with the public, to both visitors and residents in our island's outdoor resources. First with the National Park Service, and now with the State of Hawai'i for the past seven years, I have met and talked with tens of thousands of people, and for these past seven years I have been sharing information about sunscreen issues with an average of 200-300 people per week.

Those against any regulations may argue that "the government" should simply do more education. Myself, Peter Landon, volunteers and other state staff directly approach residents and visitors to '\_hihi-K\_na'u Natural Area Reserve, the third most-visited outdoor site on Maui. We have signs and posters displayed encouraging people to use sun protection that does not include chemical compounds, we hand-out deep information flyers and thousands of "shopper's cards" that list active ingredients to avoid. Collectively, we have racked-up tens of thousands of hours doing this work over the years. Direct education works better than signs and posters, but with all our efforts, we only reach about 10% of all who enter the reserve's waters. Its hot, repetitive and challenging work: even with an army of minimum-wage staff it would be nearly impossible to reach 100% of all those going into the ocean during all daylight hours.

What about all the ocean-front lands outside the reserve where we can't educate? Thanks to currents, chemical pollutants going into the ocean at one site means they go island-wide, and when these compounds bind to microplastics, or sands and sediments, they enter the ocean food-chain via limu, crabs, opihi etc, they then get taken by fish, honu and marine mammals far and wide.

Some may argue this ban should only apply to those about to go into the ocean or streams such as the Pipiwai in K\_pahulu. This argument ignores the fact that the benzene compounds (and co-active ingredients) appear in human urine 20 minutes after application, last up to 90 days in the environment and cannot be removed in wastewater treatment. Showering or flushing the toilet on land still delivers these deadly compounds into our near-shore habitats. Even if you never personally use these chemicals, eating from our waters means you're still getting exposed.

This is one reason the age-old trumpet of "consumer choice, let the consumer decide" is not adequate. "Consumer choice" really means we're relying on one person to choose for another, as in the above example. Advertising, labeling, brand-loyalty, and de-emphasizing how these chemicals react within skin cells are all tactics used by manufacturers. For personal care products, only the FDA has any authority to regulate labeling-claims, and then only if claims are medical. For personal care products, no agency has authority to test environmental claims such as "reef safe." This loop-hole allows manufactures to boldly tout this new green-washing term on the front of containers, in print much larger than the font sizes required for the ingredients on the back of product containers. Each day we see parents apply these products to small children, even toddlers, despite labeling that warns they are not safe for kids. Clearly, not all consumers read the labels or are making conscious "consumer choices."

When I ask: "Did you read the ingredients on the label?" Very few are label-literate and know to look on the back let along for the "actives" list. I have to show them where to look. People daily tell us they saw the "reef safe" claim and bought the product thinking they had made the responsible choice. Local surfers, fishermen and tourists alike, say: "I always use this brand, I bought it here in Hawai'i, it says 'reef safe,' so I thought I was doing the right thing." They express anger and multiple times each day I hear "There should be a law, I just wish these things were totally banned."

People have always had sun-protection choices: credible dermatologists agree that mineral sun-blocks and

clothing are more than sufficient to protect against both UBA and UVB rays. Chemical sunscreens only help with UVB rays, and skin cancer rates have climbed higher since chemical sunscreens became popular in the 1970s. If these products were really necessary to prevent skin cancer, really worked to prevent skin cancer, the trend would be going down, not up.

This proposed ban is the best: outlawing one or two specific compounds (such as Oxybenzone and Octinoxate) simply incentivizes the chemical industry to create new molecules that have the same properties with new patentnames. When the evidence against Oxybenzone mounted (and the patent was about to expire), low and behold, Avobenzone (with a near-identical chemical structure and behavior) became the lead ingredient. It becomes a chemical-arms race of new laws needed for every new lab creation.

We have tried education. We have tried consumer choice. Those tactics didn't work for bad hair sprays or bad coolants in refrigerators in the 1970's – laws had to be created to force manufactures to use other materials, to protect our planet's ozone. Education and "choice" didn't work in other arenas: its why there are no longer smoking sections on airplanes or restaurants, because the "choice" of one consumer impinged on another. Banning benzene-based chemicals from one island in Hawai'i won't solve all our problems with climate change, etc, but with all the other issues we've created, this is one problem we can solve, today. Maui has led the way before with bans on plastic shopping bags and food packaging. Let's lead the way again.

Mahalo, Jeff Bagshaw Volunteer Coordinator, Information and Education Associate `Ahihi-Kina`u Natural Area Reserve (DLNR/DOFAW) (808)264-7891 work-cell jeff.w.bagshaw@Hawai'i .gov