



April 1, 2015

To: Senator Jill N. Tokuda, Chair
Members, Senate Committee on Ways and Means

From: Tim Shestek, Senior Director
State Affairs

Re: **HB 621 HD 1 – SUPPORT**
Set for hearing on April 2, 2015

The American Chemistry Council (ACC) is a national trade association representing chemical and plastic manufacturers in the United States. Our members are committed to the safety of their products and to the protection of public health and the environment. To that end, our industry has implemented several programs aimed to reducing and eliminating marine debris by promoting the proper use, handling, recycling and recovery of these valuable materials. Information about these efforts can be found at www.marinedebrisolutions.org

This week, your committee will consider HB 621, legislation that would restrict the use of microbeads in personal care products. ACC supports the language contained in HB 621 HD 1. This language would bring Hawaii in alignment with existing law in Illinois and is consistent with model language adopted by the Council of State Governments last year. ACC urges your committee to support this bill so that a uniform and practical approach to this issue can be implemented nationally.

Thank you in advance for considering our views. If you have any questions or comments, please do not hesitate to contact me or ACC's Hawai'i based representatives Red Morris and/or John Radcliffe at 808-531-4551.



Beach Environmental Awareness Campaign Hawai'i

P.O. Box 25284 · Honolulu · Hawai'i · 96825

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DATE: 1st April, 2015

TO: Chair Jill Tokuda, Vice-Chair Ronald Kouchi and Members of the Committee on Ways and Means

FROM: Suzanne Frazer, President, Beach Environmental Awareness Campaign Hawai'i

RE: **TESTIMONY IN SUPPORT OF HB621 HD1**

Relating to Environmental Protection. Gradually prohibits the manufacture and sale of personal care products containing synthetic plastic microbeads to protect marine life.

Committee meeting on Thursday 2nd April, 2015 at 9:30AM in room 211.

Aloha Chair Tokuda, Vice-Chair Kouchi and Committee Members,

Beach Environmental Awareness Campaign Hawai'i (B.E.A.C.H.) supports the intention of this bill which is to ban plastic microbeads and protect marine life. This bill unfortunately fails to completely ban all plastic microbeads in personal care products and it needs amending as follows:

- **Remove “synthetic”** from all mentions of plastic microbead as “synthetic plastic microbead” does not include all plastic microbeads and to leave this in provides a loophole.
- **Remove “non-biodegradable”** from the definition of plastic microbead. To leave this in will allow manufacturers to put in so called “biodegradable” plastic microbeads. The problem with this is that there is no such thing as “biodegradable” plastic. To believe otherwise is to be misled which is the deliberate intention of unscrupulous manufacturers. They want to trick people into believing that plastic can be combined with an additive and that will make it break down. Only the additive will biodegrade. Plastic does not biodegrade, it will only break into smaller pieces. Plastic lasts forever.
- **Remove “retaining their defined shapes during lifecycle and after disposal”** from the definition of plastic. This part of the definition is in no way correct. Plastic can change shape during lifecycle and after disposal. One needs only to go to a beach with marine debris to see melted plastic and fragments of plastic. Or go to H-Power and see the powdered ash which is left behind after the plastic is burnt. It is very strange to have such a definition and *another option would be to remove the definition of plastic* from this bill as it is not needed. California is also considering a microbead bill and there is no definition of plastic in the California bill.
- **Remove “used to exfoliate or cleanse in a rinse-off product”** from the definition of plastic microbead as microbeads are added to personal care products for more than just exfoliating and cleansing - for instance they are used purely for decoration in toothpaste. They are also used as

bulking agents in products among other reasons. Also plastic microbeads are used in non rinse-off products such as sunscreen, make-up, bubble bath and wrinkle cream. Therefore the use of the microbeads should not be included in this definition unless it includes all the uses and reasons why microbeads are added to personal care products.

- **Change the start date to January 2016** and have only one date for this bill to take effect as plastic microbead pollution in the ocean needs to end. There are companies that either don't use plastic microbeads or are already removing them from their products and will do so this year. So 3-5 years is unnecessary. Especially considering that plastic microbeads have only been used in personal care products since the 1990's and prior to that time the products were formulated with natural ingredients such as sand, sea salt, sugar, fruit seeds, oats, rice, bamboo, nut shells, etc.

It is important to ban the sale and manufacture in Hawai'i of all plastic microbeads in personal care products as they are not able to be removed at wastewater facilities and therefore they get discharged into the ocean. These plastic microbeads are so small they can't be removed from the ocean or from the beach if they wash ashore.

The whole food chain is affected by plastic in the ocean. Plankton has been found to be ingesting plastic. All plastic is made with chemicals and there are also chemicals that attach onto the plastic in the ocean - these are persistent organic pollutants (POPs) such as DDT, DDE and dioxins. The chemicals in and on plastic in the ocean are passed through the food chain, bioaccumulating along the way. These chemicals cause cancer and other diseases. In the ocean, POPs attach onto not only plastic made from fossil fuels, but also plastic made from biomass.

Please pass a ban on ALL plastic microbeads, not just "synthetic" or "non-biodegradable" ones.

All plastic microbeads need to be banned including those made from bio-plastics as these do not biodegrade or compost in the ocean and will still be ingested by marine life. Plastic should never be washed down the drain in any form including "biodegradable" and "compostable" plastics.

Thank you for the opportunity to provide written testimony in support of HB621 HD1.

Sincerely,



Suzanne Frazer.
President,
B.E.A.C.H.



Beach Environmental Awareness Campaign Hawai'i is an all volunteer, non-profit organization that brings awareness and solutions to marine debris through environmental education; plastic reduction/litter prevention campaigns; and marine debris removal and research; in order to inspire actions by individuals and the community that protect Hawai'i's marine life, sea birds and ocean/coastal environment.



**Conservation Council
for Hawai'i**

Hawai'i's voice for wildlife

Kō Hawai'i leo no nā holoholona lōhiu



Testimony Submitted to the
Senate Committee on Ways and Means
Hearing: Thursday, April 2, 2015 9:30 am Room 211

In Support of HB 621 HD1 Relating to Environmental Protection

Aloha, Chair Tokuda, Vice Chair Kouchi, and Members of the Committee. The Conservation Council for Hawai'i supports HB 620 HD1, which gradually prohibits the manufacture and sale of personal care products containing synthetic plastic microbeads to protect marine life.

Products such as facial scrubs, soaps, and toothpaste contain thousands of polyethylene and polypropylene microbeads, some have between 1-5% microbeads.

Microbeads are not recoverable and are designed to wash down the drain and into the environment. Hawai'i's sewage treatment facilities cannot capture these synthetic floating particles.

Once in the environment, microplastics absorb persistent organic pollutants and are consumed by a variety of marine life, including the fish we harvest for food.

There are several natural alternatives that can replace these plastic microbeads, including ground-up fruit pits, oatmeal, coffee grounds, and sea salt.

HB 621HD 1 builds on the voluntary phasing out of these products by companies such as L'oreal, Proctor and Gamble, and Johnson and Johnson.

Please kokua. Mahalo for the opportunity to testify.

Sincerely,

Marjorie Ziegler

Marjorie Ziegler



Conservation Council for Hawai'i is a nonprofit, environmental membership organization dedicated to protecting native Hawaiian plants, animals, and ecosystems for future generations.

Established in 1950 and based in Honolulu, CCH is one of the largest and most effective wildlife organizations in Hawai'i with more than 5,000 members and supporters, including concerned citizens, educators, scientists, government agencies, and elected officials.

Through research, education, service, organizing, and legal advocacy, CCH works to stop the destruction of native wildlife and wild places in Hawai'i.

Since 1973, CCH has served as the Hawai'i state affiliate of the National Wildlife Federation.

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Executive Director: Marjorie Ziegler | Administrator: Jonnetta Peters



Rafael Bergstrom
Surfrider Foundation Oahu Chapter
HB621
WAM, April 2nd 2015, 9:30AM
Strong Support

The use of microbeads, made of small plastic particles, presents significant problems for human health and marine life. Microbeads, which are designed to be “flushed” with use, are not filtered in treatment plants and end up in our fresh and ocean ecosystems. Like many plastics, these small pieces remain in our environment without breaking down and thus enter food systems. Animals may ingest these and then subsequently the contaminated fish life can enter the human food system. Many mainstream cosmetic companies have already stopped the use of these microbeads as there are plenty of natural alternatives that can provide the same effects.

Moving forward with the progressive elimination of these detrimental and unnecessary materials is a step in the right directions and we applaud the Hawai'i State Legislature for its efforts in doing so.

Surfrider Oahu continues to advocate for a community in which we significantly reduce our reliance on all forms of single use plastics. Our Rise Above Plastics coalition believes that we can create a world in which we have a stronger kuleana towards protecting our near shore waters from unnecessary plastic pollution. Please join us in creating an environment that we respect enough to protect for generations into the future.

Mahalo for your time and consideration.

Rafael Bergstrom
Oahu Chapter Coordinator, Surfrider Foundation



DATE: April 1, 2015

TO: Chair Jill Tokuda, Vice-Chair Ronald Kouchi and Members of the Committee on Ways and Means

FROM: Stiv J. Wilson, Campaigns Director, The Story Of Stuff Project

RE: **TESTIMONY - SUPPORT WITH AMENDMENTS HB621HD1**
Relating to Environmental Protection. Gradually prohibits the manufacture and sale of personal care products containing synthetic plastic microbeads to protect marine life

Committee meeting, Thursday 2nd April, 2015 at 9:30am, room 211

Small plastic is a big problem. In 2012, researchers discovered high concentrations of plastic microbeads traced back to personal care products in all The Great Lakes. Subsequent research has shown microbeads in dozens of waterways, including drinking water sources, across the country. Wherever scientists look, they seem to find microbeads.

Plastic microbeads, designed to go down the drain, escape sewage treatment and are littered into the environment. How much is escaping? For example, in San Francisco Bay, scientists estimate that about 417 million plastic microbeads are discharged daily in this watershed. It stands to reason that wherever else there are large populations near water, the same will be true.

Once in the environment, plastic, works like a sponge for other toxic chemicals present in the water, concentrating pesticides, oil from your car, flame retardants, dioxin, and other pollutants. This concentration of chemicals can make the plastic microbeads up to a million times more toxic than the ambient water around them. This process of chemical saturation is rapid, taking a month. In addition to absorbing toxins, anything made of plastic typically has additives that give it its performance attributes: rigid, malleable, soft, hard—anywhere from 4-80% of the weight of every plastic product you touch is additives. And these additives are often toxic and quickly “desorb” from the plastic, entering the water to be bioavailable to animals—and making waterborne plastic the ultimate one two punch.

After ingestion, the concentrated chemicals can transfer to the tissue of an animal causing endocrine disruption and liver damage. Once transferred, these toxins are difficult for animals to purge. For example, in mammals, the only way for the body to get rid of these toxins is through breast milk or the umbilical chord, and thus, each subsequent generation carries a higher toxic burden. We know that bigger fish eat smaller fish, magnifying that burden up the food chain. We are at the top of that food chain, at the end of our fishing lines, we catch those big fish to eat.

Plastic microbeads also resemble fish eggs, and we know from science that plastic particles are ingested by 100s of animals, including the fish that can then die of starvation. This contamination of wildlife also poses a threat to people who consume fish and other aquatic species.

The answer to this problem is not better treatment. As I stated, wastewater plants are not equipped to completely remove plastic microbeads. Nor should the onus be on the public to pay the extreme costs of developing and installing treatment. Instead we need to stop the problem at the source.

After the discovery in The Great Lakes, concerned citizens started a market facing campaign to eliminate this plastic from consumer care products. Natural alternatives to plastic microbeads already exist, ranging from pecan and walnut shells to rice and cocoa beans. Through a variety of tactics, a coalition of advocates were able to convince Procter & Gamble, L'Oreal, The Body Shop, Colgate, and Johnson & Johnson to agree to phase them beads out. But these brands would not say when they would do it or what they would replace the plastic with. The lack of a definite commitment from large companies, coupled with the fact that hundreds of products contain these plastic microbeads, inspired a coalition of agencies, industry and nonprofits to put forward a policy that would prohibit the sale of products containing these beads. What government would allow for products in commerce that are actually designed to be littered at the end of life?

Not all the bills being considered across the country actually address and solve the problem—industry supports a bill that leaves a truck sized loophole for so-called biodegradable plastic such as PLA—the compostable corn cup you've probably seen at beer festivals. The problem is that PLA doesn't biodegrade better than traditional plastic in the environment. PLA needs an industrial composting facility to biodegrade. Industry supported legislation also leaves loopholes for other kinds of plastic, for example, the same type you find in cigarette filters. These plastics, if industry adopts them to replace status quo microbeads, will pose an identical threat to our waterways and ecosystems that this legislation is meant to stop.

We as advocates have no problem with entrepreneurs wanting to innovate. Let's make sure this law doesn't allow for the problem to endure. If the industry wants to explore the development of truly benign, biodegradable plastics, we want to make sure that they biodegrade into non-hazardous substances before they reach the end of the pipe. However, today such technology is not available. The reality is that

whether it takes two years or two months for so called biodegradable plastics to actually degrade into natural benign substances—fish will still eat them beforehand and toxins will still be absorbed during that residence time. And if plastic microbeads continue to flow into the environment via wastewater everyday, any biodegradability clock is reset with every drop. Beyond this, the intention behind the development of biodegradable plastics is to make them less harmful if they happen to escape the waste stream into the environment, but not to be intentionally littered.

For nearly a year, industry wouldn't admit that they were trying to replace plastic with plastic, choosing rather to spend big bucks to kill bills by confusing and deceiving the public and legislators alike. Now that we know their intentions, we need to put an end to the bait and switch policies they support. We need to ensure we pass a bill now that will truly addresses the problem so that we are not back here again, fighting the same fight. From media reports on business deals concerning investment into plastic microbead alternatives, it's clear what industry intends: another type of plastic as a replacement for today's microbeads. Let's ensure that government has the ability to assess whether these emerging technologies are safe, so that our shared waters are uncorrupted for generations to come.

Thank You,

Stiv J. Wilson
Campaigns Director
The Story Of Stuff Project
Stiv@storyofstuff.org
Mobile: 503.913.7381





Californians Against Waste

Conserving Resources. Preventing Pollution. Protecting the Environment.

April 1, 2015

Senator Jill N. Tokuda, Chair, Committee on Ways and Means
Senator Ronald D. Kouchi, Vice Chair, Committee on Ways and Means
415 South Beretania St.
Honolulu, HI 96813
Emails: sentokuda@capitol.hawaii.gov; senkouchi@Capitol.hawaii.gov

RE: HB621_HD1 Plastic Microbeads – SUPPORT WITH AMENDMENTS

Dear Chair Tokuda and Vice Chair Kouchi,

Californians Against Waste (CAW) is an environmental nonprofit organization dedicated to conserving resources, preventing pollution and protecting the environment through waste reduction and recycling policies. We support the intent of HB621_HD1 for the reason listed below and respectfully recommend several amendments to strengthen the measure.

Plastic microbeads are an environmental issue: They are used in many personal care products--including toothpaste, facial scrubs, and soaps--that are designed to be washed down the drain. One product alone can contain as many as 350,000 microbeads. Plastic microbeads are generally not recoverable through ordinary wastewater treatment processes. Consequently, they can end up in our rivers, lakes, and oceans, contaminating both marine and fresh water environments. Studies indicate that plastic microbeads attract and absorb toxins from the surrounding waters and can leach toxic additives into the aquatic environment. They are also mistaken for food by wildlife, including fish that humans eat. Once ingested, the toxins accumulate in the tissues of organisms and move their way up the food chain, creating a threat both to natural ecosystems and human health. Environmentally sound alternatives such as apricot shells, jojoba beans, sea salt, and sand are already widely available in natural products.

Suggested amendments:

1. Remove the definition of “plastic”

A definition for plastic is unnecessary and restrictive: The proposed definition for plastic as “a synthetic material made from linking monomers through a chemical reaction to create an organic polymer chain that can be molded or extruded at high heat into various solid forms retaining their defined shapes during life cycle and after disposal” is too restrictive. It does not include all plastics, such as:

- (1) plastics that cannot be molded at high heat into forms that retain their shape;
- (2) low-melting plastics;
- (3) plastics that are made by processes that do not link monomers through a chemical reaction (e.g., acetylating natural polymer cellulose).

Moreover, California law, which covers a range of issues on plastic products from labeling to recycling and recycled content, does not define plastics in the statute, and has not needed to do so.

2. Amend the definition of “synthetic plastic microbead”

Currently, the measure defines and prohibits a synthetic plastic microbead, or “any intentionally added non-biodegradable solid plastic particle measuring less than five millimeters in size and used to exfoliate or cleanse in a rinse-off product.”

We propose that the definition be modified to strike out the word “synthetic” and the word “non-biodegradable”, as both provide loopholes for biodegradable plastics.

Biodegradable plastic is not the solution and should not be exempt: If a product does in fact break down in a marine environment, it does so over six months or more according to one scientific standard. Consequently it persists in the aquatic environment and remains bioavailable to wildlife who mistake it for food for that undetermined amount of time. Biodegradable plastics, just like traditional plastics, contain chemical additives that may be unknown and unsafe. Both plastics also attract hydrophobic pollutants. While in the environment, all plastic, regardless of its degradability, absorbs toxins, collecting and contaminating the environment or concentrating them up the food chain. Therefore, safe alternatives must be inert to the ecosystem before they leave the wastewater treatment system and enter the water. We should not be switching from one type of plastic that contaminates our waters and food chain, to another type of plastic that will react similarly.

Biodegradable claims are misleading and cannot be proven: Since 2004, the California legislature has prohibited the sale of certain plastic products with degradability claims unless they meet specific standards. In 2011, CAW sponsored and passed a state law to expand those provisions. Under current California law, the sale of any plastic product with “biodegradable” or similar claims of degradability is strictly prohibited, and only “compostable” products that have met ASTM D6400 or other specified ASTM Standard Specifications may be sold in the state. A California legislative committee analysis found that, “Many plastic products that are currently sold...claim to be 'biodegradable,' even though there is no technical standard to test against that term...” A Michigan State University study published earlier this year in Environmental Science and Technology found that five different additives claiming to enhance degradation did not significantly increase biodegradation when added to plastics.

California has a proposed measure on plastic microbeads: CAW is a co-sponsor of a similar measure to ban plastic microbeads in the state of California. However, the California bill, Assembly Bill 888, does not include a loophole for “synthetic” plastic microbeads that are “non-biodegradable”, nor does it define “plastic”, for the reasons previously noted. I have attached a factsheet with more information.

CAW hopes you will consider this information and amend HB621_HD1 accordingly when it is heard in committee, to prevent the replacement of one problematic plastic ingredient with another. Please feel free to contact us in the future with any questions.

Sincerely,



Sue Vang, Policy Analyst
Californians Against Waste

attachment

Date: Thursday April 2, 2015, 9:30am

To: Senate Committee on Ways and Means

Re: Support of HB621 HD1

Dear Chair Tokuda, Vice Chair Kouchi, and Members of the Senate Committee on Ways and Means:

I am an MSW student at the University of Hawai'i at Manoa Myron B. Thomson School of Social Work, I am testifying in support of HB621 HD1 for the following reasons:

1. Synthetic plastic microbeads are too small to be filtered out of waste water and end up in our ecosystems where it can be mistaken for food and eaten by many different species of animal. Eventually those fish get eaten by bigger fish, up the food chain, where humans then eat those fish, i.e. Tuna.

2. The build up of synthetic plastic microbeads in animals bodies can cause the animal to die from starvation because its stomach is full of non edible material. On a related example, remember the sperm whale that was found dead with 100 plastic bags and other material in its stomach

3. Microbeads over time pick up toxic chemicals which can then cause the wildlife to die.

4. Most consumers are unaware that the facial scrub they are using contain harmful synthetic plastic microbeads being washed down the drain after every use due how difficult it is to decipher the ingredients on the packaging.

For the reasons mentioned above and others, I urge you to vote yes on this bill. Thank you for the opportunity to present this testimony.

With respect,

Chris McConnell

MSW student, UH Manoa

Cmm4@hawaii.edu

DATE: 1st April, 2015

TO: Chair Jill Tokuda, Vice-Chair Ronald Kouchi and Members of the Committee on Ways and Means

FROM: Dean Otsuki
P.O. Box 25284
Honolulu, HI 96825

RE: **TESTIMONY IN SUPPORT OF HB621HD1**
Relating to Environmental Protection. Gradually prohibits the manufacture and sale of personal care products containing synthetic plastic microbeads to protect marine life

Committee meeting, Thursday 2nd April, 2015 at 9:30am, room 211

Aloha Chair Tokuda, Vice-Chair Kouchi and Committee Members,

I am writing in support of HB621HD1 to prohibit the manufacture and sale of personal care products containing plastic microbeads to protect marine life.

I'm concerned about the definition of "plastics" in this bill because plastics do not retain their shape during their life cycle and after disposal. Plastic breaks down into smaller and smaller pieces if exposed to UV light and high temperatures. Please amend the definition of plastic to add "derived from fossil fuels or biomass (plant based)". Please amend the bill to remove "synthetic" from synthetic plastic microbeads as this does not include all the types of plastic.

Under the definition of "Synthetic plastic microbead" the word non-biodegradable should not be used. This provides a loophole for manufacturers to produce "biodegradable" plastic microbeads with additives such as starch or compostable plastic microbeads which would not compost in the ocean environment. These would still harm marine life. There are other natural alternatives such as ground walnuts, almonds, pumice, sand, etc. to replace plastic microbeads.

Also in the definition of synthetic plastic microbead, plastic microbeads are "used to exfoliate or cleanse in a rinse off product." Plastic microbeads are used for many other reasons such as aesthetic and filling, therefore all reasons and uses should be included as to why they are in personal care products or eliminate the uses part of the microbeads definition.

I am respectfully requesting to amend the starting date to January 1, 2016 because polluting the ocean with plastic microbeads is a very serious problem and needs to be addressed right away.

Thank you for this opportunity to provide written testimony in support of HB621HD1.

Aloha,

Dean Otsuki

HB621

Submitted on: 4/1/2015

Testimony for WAM on Apr 2, 2015 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Edward Bohlen	Individual	Support	No

Comments: Hawaii should join other states protecting the environment by banning sale of cosmetics containing plastic microbeads, which are not removed by sewage treatment and may harm marine life. Please pass this bill. Mahalo!

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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