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GOVERNOR OF HAWAI'I
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAI'I

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Testimony in SUPPORT of HCR0103

URGING ALL BRANCHES OF THE UNITED STATES MILITARY OPERATING IN HAWAII TO IMPLEMENT CHANGES IN THEIR POLICIES TO REDUCE, TO THE EXTENT POSSIBLE, THE USE OF PRODUCTS CONTAINING PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES.

REPRESENTATIVE NICOLE LOWEN, CHAIR
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

REPRESENTATIVE MARK HASHEM, CHAIR
HOUSE COMMITTEE ON CORRECTIONS, MILITARY AND VETERANS

Hearing Date: 3/28/2023 Room Number: 325

Fiscal Implications: This measure will not significantly impact the priorities identified in the Governor's Executive Budget Request for the Department of Health's (Department) appropriations and personnel priorities.

Department Testimony: The Department of Health supports this resolution in its efforts to decrease the burden of PFAS contamination in Hawaii. The Department also appreciates efforts to improve transparency and the sharing of information related to environmental contamination. Further understanding of historical releases of PFAS and known PFAS evaluations will help the Department in its efforts to decrease PFAS exposure to humans and the environment and will promote a healthier Hawaii.

Thank you for the opportunity to testify on this resolution.

TESTIMONY ON HCR 103 / HR 109
URGING ALL BRANCHES OF THE UNITED STATES MILITARY OPERATING IN HAWAII TO IMPLEMENT CHANGES IN THEIR POLICIES TO REDUCE, TO THE EXTENT POSSIBLE, THE USE OF PRODUCTS CONTAINING PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES.

The Honorable Nicole Lowen, Chair
The Honorable Elle Cochran, Vice Chair
House Committee on Energy & Environmental Protection

The Honorable Mark J. Hashem, Chair
The Honorable Cory M. Chun, Vice Chair
House Committee on Corrections, Military & Veterans

Tuesday, March 28, 2023 at 11:05 A.M.
Conference Room 325 & Videoconference
415 South Beretania Street

Chairs Lowen and Hashem, Vice Chairs Cochran and Chun, and Members of the Committees:

The Hawaii Military Affairs Council ("MAC") **supports** HCR 103 / HR 109**.**

The Hawaii Military Affairs Council (MAC) was established in 1985 when the Chamber was appointed by the State to serve as the liaison to the military. The MAC advocates on behalf of Hawaii's military, and is comprised of business leaders, academic institutions, State and County officials, members of the CODEL, community leaders, labor unions and organizations and retired U.S. flag and general officers. The MAC works to support Hawaii's location as a strategic U.S. headquarters in the Indo-Asia-Pacific region which is crucial for U.S. national and homeland security.

The 2020 National Defense Authorization Act took significant steps to address per- and polyfluoroalkyl substances (PFAS) contamination throughout the U.S., including communities in or near military bases and for the U.S. Environmental Protection Agency (EPA) to accelerate the pace of actions already under consideration in the agency's PFAS Action Plan.

All military branches in Hawaii have and continue to take serious accelerated action to safely and completely exceed the most stringent standards for PFAS.

While the Department of Defense (DOD) has extremely high safety standard for putting out fires quickly which limits the commercially available PFAS-free foam options for use by

military installations in Hawaii, we ask the Committee's consideration to support the accelerated development so that all firefights in Hawaii – federal, state, local, and private – keep public spaces safe.

BE IT FURTHER RESOLVED that the State of Hawaii calls the US Congress and the Department of Defense to review its extremely high safety standard for putting our fires and accelerate development of PFAS-free firing fighting options to remove PFA/AFFF from installations in Hawaii ahead of NDAA and DOD mandated timelines.

Thank you for the opportunity to offer our support for the resolutions.

To: The Honorable Chairs Nicole Lowen and Mark Hashem, the Honorable Vice Chairs Elle Cochran and Cory Chun, and Members of the Committees on Energy and Environmental Protection and Corrections, Military and Veterans

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

Re: **Hearing HCR103/HR109 URGING ALL BRANCHES OF THE UNITED STATES MILITARY OPERATING IN HAWAII TO IMPLEMENT CHANGES IN THEIR POLICIES TO REDUCE, TO THE EXTENT POSSIBLE, THE USE OF PRODUCTS CONTAINING PERFLUORALKYL AND POLYFLUORALKYL SUBSTANCES**

Hearing: Tuesday March 28, 2023, 11:05 p.m., room 325

Aloha Chairs Lowen and Hashem, Vice Chairs Cochran and Chun, and Members of the Committees on Energy and Environmental Protection and Corrections, Military and Veterans:

Hawai‘i Reef and Ocean Coalition and Climate Protectors Hawai‘i STRONGLY SUPPORT HCR103/HR109!

The Hawai‘i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working

since 2017 to protect Hawaii's coral reefs and ocean. HIROC is deeply concerned about PFAS "forever chemicals" in the marine environment.

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate. Climate Protectors Hawai'i is deeply concerned about PFAS "forever chemicals" in the environment.

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are persistent, toxic substances. **PFAS are often called "forever chemicals" because they do not naturally break down in the environment and can continue to pollute the environment for thousands of years. PFAS can contaminate drinking water and bioaccumulate in fish and wildlife. PFAS can have multiple adverse health effects on animal and human populations including kidney, prostate and testicular cancers, reproductive and developmental harm, behavioral changes, thyroid and hormone disruption, obesity, impaired immune function, increased cholesterol and blood pressure levels, and vital organ damage.**

Some of the highest concentration levels of PFAS in the country have been found at and around military bases, largely because of the use of firefighting foam known as aqueous film-forming foam (AFFF) that is toxic and contains PFAS. There are PFAS-free alternatives to AFFFs.

As an island state, when forever chemicals are brought in and used in the State, they never leave. Instead, they can make their way into residents' bodies and the State's wastewater, landfills, and eventually groundwater and the drinking water supply. **PFAS can contaminate the groundwater and drinking water supply of thousands of Hawaii residents**. Hawai'i can no longer afford to use toxic substances that contaminate the State's finite resources and risk residents' health.

This Concurrent Resolution and Resolution would urge the U.S, military to reduce, to the extent possible, the use of products containing PFAS, with certain exceptions, and to immediately discontinue the use of AFFF except in an emergency, properly dispose of any contaminated personal protective equipment, and disclose transparently all information relating to past PFAS

releases. This is an important measure to protect human health and the environment in Hawai‘i.

The Hawai‘i Reef and Ocean Coalition and Climate Protectors Hawai‘i **STRONGLY SUPPORT** this Concurrent Resolution and Resolution to encourage the military to reduce the presence of PFAS “forever chemicals” in Hawai‘i. Please pass this bill! Mahalo!

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

Environmental Caucus of
The Democratic Party of Hawai‘i

To: The Honorable Nicole E. Lowen, Chair
The Honorable Elle Cochran, Vice Chair
Members of the Committee on Energy & Environmental Protection

The Honorable Mark J. Hashem, Chair
The Honorable Cory M. Chun, Vice Chair
Members of the Committee on Corrections, Military & Veterans

Re: **HCR 103 and HR 109 – URGING THE TO MILITARY REDUCE THEIR USE OF PFAS**
Hearing: Tuesday, March 28, 2023, 11:05 a.m., Conference Room 325 & Videoconference

Position: **Strong support**

Aloha, Chairs Lowen and Hashem, Vice Chairs Cochran and Chun, and Members of the Committee on Energy & Environmental Protection and Committee on Corrections, Military & Veterans:

The Environmental Caucus of the Democratic Party of Hawai‘i and its 7,500 members strongly support HCR 103 and HR 109. These measures urge all branches of the U.S. Military operating in Hawaii to implement changes in their policies to reduce, to the extent possible, the use of products containing perfluoroalkyl and polyfluoroalkyl substances.

PFAS is a carcinogenic toxin that goes beyond our deepest understanding of what is safe drinking water. The EPA has set an interim maximum contaminate level (MCL) at 4 parts per TRILLION because this is the lowest amount measurable by qualified laboratories, not because of scientific evidence that show that 4 parts per TRILLION is in fact a safe amount of PFAS to consume. There is no safe amount!

PFAS is known to cause CANCER, IMMUNE DISRUPTION, FERTILITY PROBLEMS, among many other illnesses, complications, and birth defects.

PFAS has been detected in Kunia, Waipio, Honolulu and Kahului airports, and eight Hawaii military sites, including the Navy's Pearl Harbor drinking water.

This poison goes beyond the general public's comprehension as it has been used in everyday products for nearly a century and yet we are only now learning about it thanks to Red Hill. It has been used since the 1940's in many consumer products: Teflon pans, Scotchguard, food packaging, raincoats, furniture, cosmetics, clothing, and dental floss, in addition to the AFFF with PFAS used at firefighting training areas at airports and military installations. The resent spill of AFFF with PFAS concentrate at Adit 6 at the Red Hill Facility released 1,300 gallons in

November 29, 2022. This is an unconscionable amount where 4 parts per TRILLION is the maximum contaminant level of PFAS for safe drinking water. As a visual, this MCL amount is equivalent to 4 drops of food coloring in 18 million gallons of water or put in another way, 4 drops in 20 Olympic-sized swimming pools, each holding 660,000 gallons of water.

We clearly need to urge the U.S. Military to prepare and plan for the reduction of its use of PFAS, its clean-up and remediation, and plans for risk-prevention, including water filtration. This known carcinogen passes through our life cycle by the water we drink, air that we breathe, fish and wildlife we consume, wastewater we cause, and reclaimed wastewater and biosolids used on the agricultural produce we eat. Furthermore, PFAS bioaccumulates as it is known as "Forever Chemicals." It will not biodegrade for 700-1000 years. It can pass from mother to fetus through her bloodstream and from mother to child through breastmilk. Its multigenerational and bioaccumulative properties compound the toxicity of the PFAS in the human body.

It is important to urge all branches of the U.S. Military operating in Hawaii to implement changes in their policies to reduce, to the extent possible, the use of products containing perfluoroalkyl and polyfluoroalkyl substances for the health and safety of people's lives and the environment, including our drinking water aquifer and wells. Please pass these measures.

Mahalo nui loa,

/s/ Melodie Aduja and Alan Burdick
Co-chairs, Environmental Caucus
Democratic Party of Hawaii

March 28, 2023

To: The Honorable Nicole Lowen, Chair
Members, House Committee on Energy and Environmental Protection

The Honorable Mark Hashem, Chair
Members, House Committee on Corrections, Military and Veterans

From: Tim Shestek
Senior Director, State Affairs

Re: **HCR 103 / HR 109 – Comments**

The American Chemistry Council (ACC) appreciates the opportunity to submit the following comments relative to both HCR 103 and HR 109, resolutions urging the United States military operating in Hawaii to reduce the use of products containing perfluoroalkyl and polyfluoroalkyl (PFAS) substances.

ACC supports a comprehensive approach to managing PFAS substances that helps to ensure protection of human health and the environment. However, the language contained in HCR 103 and HR 109 is extremely broad, especially as it relates to categorizing all PFAS as the same substances with equal hazard and risk profiles. This approach is not scientifically sound and for this reason, we must respectfully oppose HCR 103 and HR 109 as currently drafted.

Background

PFAS are a diverse group of chemistries characterized by the strong bond between fluorine and carbon. Because of this strong bond, PFAS provides products with strength, durability, stability, and resilience. These properties are critical to the reliable and safe function of a broad range of products that are important for industry and consumers, such as the smartphones, tablets, and telecommunications systems; aircraft; solar panels and turbines critical to alternative energy development; and medical devices. Attached is information that provides an overview of this group of chemistries and how they are used in various applications, including their importance to the military.

PFAS includes a variety of different chemicals with different properties and characteristics. Therefore, the hazard and risk profiles of various PFAS are different. According to the US EPA, "approximately 600 PFAS are manufactured (including imported) and/or used in the United States." Among these 600 are substances in the solid (e.g., fluoropolymers), liquid (e.g., fluorotelomer alcohols) and gaseous (e.g., hydrofluorocarbon refrigerants) forms. The fundamental physical, chemical, and biological properties of solids, liquids and gases are clearly different from one another.

The very distinct physical and chemical properties of the three types of commercial PFAS described demonstrate how varied they are and how setting a policy using a broad definition of PFAS could have significant impacts to manufacturers of a variety of different products and the industries and entities that use them.

Many entities that have explored the possibilities of a class-based approach to regulating these substances have recognized the significant challenges:

- ECOS – the Environmental Council of the States – which represents state and territorial environmental agency leaders, several of whom have implemented regulatory programs in their home states, has said:

"Many regulators and subject-matter experts advise against grouping PFAS as an entire class." *(ECOS. Processes & Considerations for Setting State PFAS Standards (February 2020))*

- The Vermont Department of Environmental Conservation, which was specifically charged by the legislature to develop a class regulation or to explain why such a regulation wasn't possible said, "The Review Team spent over a year deliberating, researching, and discussing the potential to regulate PFAS as a Class. After reviewing the current peer-reviewed literature, as well as the available toxicology data for PFAS, the Review Team determined that at the current time it is not feasible to regulate PFAS as a Class." *(https://dec.vermont.gov/sites/dec/files/PFAS/20180814-PFAS-as-a-Class.pdf)*

- Federal scientists participating in a workshop convened by the National Academies of Science, Engineering, and Medicine (NASEM) to review the federal PFAS research program acknowledged the broad diversity of properties with this group of substances, concluding that "PFAS substances thus present unique challenges for grouping into classes for risk assessment." *NASEM. Workshop on Federal Government Human Health PFAS Research, October 26-27. Board on Environmental Studies and Toxicology (2020). https://www.nap.edu/read/26054/chapter/1*

- In a recently published peer review conducted by a panel of experts, most agreed that all PFAS should not be grouped together for risk assessment purposes. Most experts also agreed that it is inappropriate to assume equal toxicity/potency across the diverse class of PFAS. *https://scipinion.com/panel-findings/risk-assessment-of-pfas/*

ACC looks forward to working with you and the Legislature to ensure that any approach to the management of PFAS is grounded in sound scientific information. Thank you in advance for considering our views. If you have any questions, please do not hesitate to contact me at 916-448-2581 or via email at tim_shestek@americanchemistry.com. You may also contact ACC's Hawaii based representative Ross Yamasaki at 808-531-4551 or via email at ryamasaki@808cch.com

PFAS: Critical to America's Defense

American Chemistry Council

Fluorotechnology (PFAS) products are essential to many military applications.

PFAS enables:

- Improved vehicle connectivity on wireless networks, enabling low smoke generation, providing flame resistance and durability, and reducing the number of antennas required;
- Apparel and equipment that provide protection in extreme environments and against chemical warfare agents;
- Ultra-high frequency wire and cable insulation used for navigation, electronic flight control (i.e., fly-by-wire), control, and aircraft communications;
- High- and low- temperature brake and hydraulic fluids used in military aircraft control systems;
- Chemical-resistant tubes, hoses, and fluid seals;
- Seals, gaskets, and binders in military drive trains (electric and internal combustion) for ground, sea and air platforms.

PFAS helps make possible advanced technologies that give our military personnel the tools to accomplish their missions and return home safely.

PFAS chemistries in commerce today have been approved by regulators for use. Many manufacturers of PFAS in the U.S. and elsewhere have phased out production of long-chain chemistries, including PFOA and PFOS, and major fluoropolymer manufacturers have made substantial investments in emissions reduction.[1]

All PFAS are not the same, and overly broad regulations threaten access to these critical chemistries.

[1] Korzeniowski et al. A critical review of the application of polymer of low concern regulatory criteria to fluoropolymers II: Fluoroplastics and fluoroelastomers. June 2022.

202302-010

HCR-103
Submitted on: 3/22/2023 11:33:30 AM
Testimony for EEP on 3/28/2023 11:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Mahalo to the many legislators who introduced HCR103/HR109 urging all branches of the United States military operating in Hawaii to reduce their use of products containing PFAS substances.

Now that we know Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) have adverse health impacts we need to reduce their use.

Due to the Military's large presence and use of chemicals in Hawaii it is their duty to their employees and to Hawaii residents to reduce the use of products containing PFAS.

I support passage of HCR103/HR109.

Virginia Tincher, Oahu

HCR-103
Submitted on: 3/22/2023 1:38:10 PM
Testimony for EEP on 3/28/2023 11:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Lynda Williams	Individual	Comments	Written Testimony Only

Comments:

Dear Legislators,

I'm sure your heart is in the right place with this, but honestly, it is too weak. You need to demand that all branches of the US military IMMEDIATELY cease ALL use of these poisonous PFAS chemicals & clean up the mess they made, and fully disclose all uses in all branches for all time. They need to immediately start processing compensation to victims. There is no reason to use these forever deadly chemicals. And what is the point of the defense department "defending us" if in the process they are killing us?

Please be a stronger advocate to protect the people & the environment of Hawaii.

Mahalo,

Lynda

HCR-103
Submitted on: 3/27/2023 11:00:11 AM
Testimony for EEP on 3/28/2023 11:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Sherry Pollack	Individual	Comments	Written Testimony Only

Comments:

While I appreciate the intent of this resolution, 'requesting' is too polite. Urging "all branches of the United States military operating in Hawaii to implement changes in their policies to reduce, to the extent possible, the use of products containing perfluoroalkyl and polyfluoroalkyl substances" is insufficient to address this crisis. Oahu is already suffering from the contamination of these forever-chemicals due to the Navy's criminal negligence at Red Hill. Hawaii cannot afford to further risk contamination of our finite resources and risk the health of our communities. Our State lawmakers and Congressional Delegation need to *demand* these measures listed in this resolution, "urging" is not enough.