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**Testimony COMMENTING on SB539**
**RELATING TO TOXIC CHEMICALS**

SENATOR MIKE GABBARD, CHAIR
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

SENATOR ANGUS L.K. McKELVEY, CHAIR
SENATE COMMITTEE ON GOVERNMENT OPERATIONS

Hearing Date: February 11, 2025 Room Number: 225

**Fiscal Implications:** This measure will 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 (DOH) respectfully offers comments and clarifications to SB539. The Hawaii Environmental Action Levels (EALs) primarily represent a compilation of USEPA and other State Agency guidance pertinent to environmental contamination issues. These documents are posted on the Hazard Evaluation and Emergency Response (HEER) EAL webpage (https://health.hawaii.gov/heer/guidance/ehe-and-eals/). The scientific justification for the EALs, including references, are provided in detail in the appendices of the guidance. Additionally, justification for any updates is specifically discussed in Appendix 9 of the guidance document.

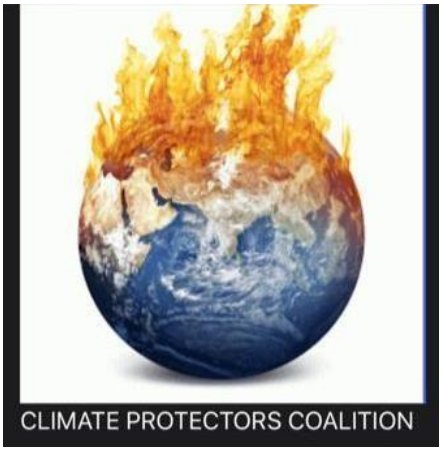
Prior to setting EAL guidance, the Department coordinates with USEPA, other states and the private sector. The methods used to prepare the EALs are similar to that of developing "Environmental Screening Level (ESL)" by the EPA. All EAL guidance has been reviewed by experts at EPA, and researchers from the University of California system, who have peer reviewed our guidance and deemed it scientifically sound. For over thirty years, Hawaii's guidance has been presented to experts in respective fields during numerous national and

international conferences. Because the EALs serve as guidance, when a chemical is found to be more toxic than previously thought by the USEPA or another agency, the EAL is reduced (reflecting a lowering of the "safe" concentration). In other cases, when the initial estimates of a chemical's toxicity are found to be overly conservative, the EAL is adjusted upwards. Overall, Hawaii's EALs are more conservative (lower) than similar action or screening levels used by other states. This is because the Hawaii EALs emphasize potential leaching of contaminants from soil and impacts to the island's groundwater resources.

EALs and MCLs are both scientifically derived yet are based on two different concepts. MCL's are exclusive to drinking water and represents the allowable concentrations of chemical substances. Anything below should not pose a risk to human health during prolonged exposure. The EALs are used to quickly screen soil, water and air for potential contaminants and provides guidance for the responsible party to take remedial actions. Factors that need to be considered when establishing EALs include (but are not limited to) health risks, environmental and aquatic risks, the physiochemical properties of the chemical, the environment in which the chemical is in (i.e., water or soil), the geography, the feasibility and the extent of remediation possible. The limitations of instruments used for detection and analysis, such as the sensitivity and detectable threshold levels are also incorporated. Considering these factors, the lowest most feasible, and safest value is set as an EAL.

The EALs are considered a "living document" and the Department welcomes comments and suggestions for updates from the public, as stated in the Foreward to the EAL guidance. We fully understand the importance of transparency, trust, and effective communication with the public. The Department is open to having public meetings and forums to educate and inform the public of any potential amendments to the EALs and continue to provide webinars on the background and use of the EALs as posted on the HEER webinar webpage https://health.hawaii.gov/heer/guidance/heer-webinars.

Thank you for the opportunity to testify.




To: The Honorable Chairs Mike Gabbard and Angus McKelvey, the Honorable Vice Chairs Tim Richards, III, and Mike Gabbard, and Members of the Committees on Agriculture and Environment Government Operations.

From: Climate Protectors Hawai‘i (by Ted Bohlen)

Re: **Hearing SB539 RELATING TO TOXIC CHEMICALS**

Hearing: Tuesday, February 12, 2025, 3:10 p.m., room 225

Aloha Chairs Gabbard and McKelvey, Vice Chairs Richards and Gabbard, and Members of the Committees on Agriculture and Environment Government Operations!

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 SUPPORTS SB539!**

This bill requires State agencies that monitor environmental toxins and pollutants to establish environmental action limits (EALs) to ensure the preservation of a safe environment.

**EALs are thresholds set for specific pollutants or substances in the environment**, including air, water soil, and biota. **EALs are a fundamental component of environmental protection and public health strategies. They play a vital role in ensuring that both human populations and ecosystems are safeguarded from the harmful effects of pollution**, while also promoting sustainable practices and regulatory accountability. **Effective implementation and enforcement of these limits are essential for achieving long-term environmental and public health goals.**

EALs can take various forms, including Maximum Contaminant Levels (MCLs: Standards set for drinking water quality),Ambient Water Quality Criteria (AWQC: Guidelines for the quality of water bodies to protect aquatic life) and National Ambient Air Quality Standards (NAAQS: Standards for air pollutants established to protect public health and the environment).

**EALs are crucial for several reasons**:

1. **Protecting Human Health**

EALs are established to safeguard public health by **limiting exposure to harmful substances**. For instance, pollutants can cause respiratory issues, neurological disorders, and other health problems. Setting action limits helps ensure that concentrations of hazardous substances in the environment remain below levels that could pose risks to human health. Source: U.S. Environmental Protection Agency (EPA). "Integrated Risk Information System (IRIS)." EPA IRIS (https://www.epa.gov/iris)

2. **Safeguarding Ecosystems**:

EALs help **protect wildlife and ecosystems from harmful pollutants**. Many chemicals can disrupt biological processes, leading to population declines and ecosystem disruption.

Source: World Health Organization (WHO). "Protecting the Environment: A Guide for Public Health Professionals." WHO Report (https://www.who.int/publications/i/item/9789241563584)

3. **Preventing Environmental Degradation**:

EALs **contribute to the sustainable management of natural resources by preventing pollution from exceeding safe levels**. This helps maintain the quality of air, water, and soil.

Source: National Oceanic and Atmospheric Administration (NOAA). "National Water Quality Monitoring Council." NOAA Water Quality Monitoring (https://www.noaa.gov)

4. **Guiding Regulatory Action**:

Regulatory agencies, such as the EPA, use EALs to develop environmental laws and policies. They **provide a scientific basis for setting standards and permits**.

Source: U.S. Environmental Protection Agency (EPA). "Standards and Guidelines for the Protection of Aquatic Life." EPA Standards (https://www.epa.gov/wqc)

5. **Encouraging Sustainable Practices**:

By establishing clear limits, **industries are encouraged to adopt cleaner technologies and practices that minimize environmental impact**.

Source: United Nations Environment Programme (UNEP). "Sustainable Development Goals." UNEP SDGs (https://www.unep.org/explore-topics/sustainable-development-goals)

6. **Monitoring and Accountability**:

EALs facilitate the monitoring of environmental quality and compliance with environmental laws. They **provide measurable targets for assessing pollution control efforts**.

Source: Environmental Protection Agency (EPA). "Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants." EPA Water Quality Assessment (https://www.epa.gov/waterdata)

7. **Public Awareness and Engagement**:

Establishing EALs can help **raise public awareness about environmental issues,** fostering community engagement and advocacy for pollution reduction.

Source: Environmental Defense Fund (EDF). "Engaging Communities in Environmental Health." EDF Community Engagement (https://www.edf.org)

8. **Responding to Emerging Risks**:

EALs **can be revised as new environmental risks and pollutants are identified**, allowing for adaptive management of environmental issues.

Source: U.S. Geological Survey (USGS). "Emerging Contaminants." USGS Emerging Contaminants (https://www.usgs.gov/science/mission-areas/water-resources/science/emerging-contaminants).

**This bill will require agencies to establish thresholds needed to ensure the preservation of a safe environment.**

**Please pass this bill!**

**Mahalo!**

Climate Protectors Hawai‘i (by Ted Bohlen)

# Environmental Caucus of The Democratic Party of Hawai‘i

**February 9, 2025**

**Testimony in Support of SB539: Relating to Toxic Chemicals**

**To:** Sen. Angus L.K. McKelvey, Chair,
Mike Gabbard, Vice Chair, and
Members of the Committee on Government Operations
and
Mike Gabbard, Chair,
Herbert M. ‘Tim” Richards, III, Vice Chair, and
Members of the Committee on Agriculture and Environment

**From:** The Environmental Caucus of the Democratic Party of Hawai‘i

**Date:** February 11, 2025, 3:10 p.m., Conf Room 225 & video

**Subject:** **Strong Support for SB 539** - Relating to Toxic Chemicals

**Aloha, Chairs, Vice Chairs, and Members of the Committees!**

The Environmental Caucus of the Democratic Party of Hawai‘i strongly supports SB 539. This bill addresses the critical issue of toxic chemicals in our environment. SB539 would require State agencies that monitor environmental toxins and pollutants to establish environmental action levels (EALs) to ensure the preservation of a safe environment. These EALs are essential for protecting public health and the environment from harmful contaminants.

**Key Points:**

1. **Establishment of Environmental Action Levels (EALs):** SB 539 mandates the creation of EALs by State agencies to monitor and control toxic chemicals.
2. **Transparency and Public Participation:** The bill requires public notice and a minimum 30-day comment period before any modifications to EALs can be made, ensuring transparency and community involvement.
3. **Community Empowerment:** SB 539 establishes a process for residents to petition for modifications to EALs, allowing communities to advocate for stronger environmental protections.

**Arguments in Support:**

1. **Protecting Public Health:** By establishing EALs, SB 539 ensures that state agencies actively monitor and regulate toxic chemicals, reducing the risk of exposure to harmful

pollutants. This is crucial for safeguarding the health of our residents, particularly vulnerable populations such as children and the elderly.

2. **Environmental Preservation:** EALs help prevent environmental degradation caused by toxic chemicals. By setting clear action levels, the bill promotes proactive measures to protect Hawai‘i’s unique ecosystems, including its soil, water, and wildlife.

3. **Enhancing Regulatory Framework:** SB 539 strengthens the State’s regulatory framework by providing clear guidelines for monitoring and managing toxic chemicals. This promotes accountability and ensures that state agencies are equipped to address emerging environmental challenges effectively.

4. **Community Involvement:** The bill’s requirement for public notice and comment periods ensures that community members have a voice in the decision-making process. This fosters transparency and builds trust between the government and the public.

5. **Empowering Residents:** By allowing residents to petition for modifications to EALs, SB 539 empowers communities to advocate for stricter environmental protections based on their specific needs and concerns. This promotes a more inclusive and responsive regulatory system.

**Examples of Need:**

1. **PFAS Contamination:** Persistent toxic chemicals like the PFAS (per- and polyfluoroalkyl substances) class of “forever chemicals” have been found in water supplies across the United States, including in Hawai‘i. Establishing proper levels of EALs would help regulate these harmful substances and prevent further contamination.

2. **Pesticide Exposure:** Agricultural areas in Hawai‘i have faced issues with pesticide runoff, leading to harmful effects on local communities and ecosystems. SB 539 would ensure that such pollutants are monitored and controlled to protect public health and the environment.

3. **Industrial Pollution:** Areas near industrial facilities often experience higher levels of toxic pollutants in the air and soil. Implementing EALs would provide a framework for addressing and mitigating these issues, promoting cleaner and safer environments for residents.

4. **Petroleum Contamination:** Fuel storage tank leaks can lead to contamination with Total Petroleum Hydrocarbons (TPH), including TPH-G (gasoline), TPH-O (other petroleum products), and TPH-D (diesel). These contaminants pose significant risks to soil and groundwater quality, necessitating stringent EALs to ensure proper cleanup and prevent further environmental damage.

**DOH EAL Adjustments:** The Department of Health (DOH) in Hawai‘i has faced scrutiny over its handling of EALs for Total Petroleum Hydrocarbons (TPH). Initially, the DOH increased (weakened) the EALs for TPH from 100 parts per billion (ppb) to 266 ppb based on updated toxicity factors and a conservative approach to ensure public safety. (Bear in mind that a

*higher EAL* is a more *lenient standard.* A polluting industry is not expected to clean up its practices until the pollution *exceeds* the level of the EAL.) Community members and environmental groups argued that the new EALs were not protective enough, especially for vulnerable populations exposed to lower levels of TPH. In response to ongoing concerns and new research, the DOH later revised the EALs back down to 100 ppb to better reflect the actual risk levels and provide a more accurate measure for protecting public health. However, some victims have reported harm at EALs as low as 30-50 ppb, highlighting the need for stricter regulations and more transparent processes.

**About 3 years ago, from December 2022 to April 2023, and continuing (and worsening to as recently as November 2024), with no fanfare, and very little notice, the Hawai'i Department of Health has substantially *weakened* the anti-pollution EALs of most of the PFAS class of chemicals that it reviews. This action has been contrary to the U.S. Environmental Protection Agency's (EPA's) actions at the same time. EPA has been *strengthening those standards.* Please see the Attachment, which details this DOH activity. This conduct must not be repeated. This bill will help to stop it.**

**EPA vs. DOH Standards:** The U.S. Environmental Protection Agency (EPA) recently reduced the Maximum Contaminant Levels (MCLs) for Perfluorooctanoic Acid (PFOA, another "forever chemical") to 4 parts per trillion (ppt) based on extensive research showing significant health risks even at very low levels. In contrast, the Hawai'i DOH increased its EAL for PFOA to 12 ppt and EAL for PFOS to 7.7, a decision that has raised concerns among residents and environmental advocates who believe the DOH's standards are not stringent enough to protect public health. DOH has since decreased its EALs for PFOA and PFOS to 4 ppt to align with EPA's MCLs. Establishing EALs is critical to prevent and address such contamination, especially in areas near drinking water aquifers, ensuring our water sources remain safe and uncontaminated.

The Environmental Caucus of the Democratic Party of Hawaii strongly supports SB539, which seeks to address the regulation of toxic chemicals, including perfluorobutane sulfonate (PFBS). The EPA's Maximum Contaminant Level (MCL) for PFBS is set at a stringent 4 parts per trillion (ppt), reflecting its commitment to protecting public health. In stark contrast, the Hawaii Department of Health (DOH) maintains an Environmental Action Level (EAL) for PFBS at 2,000 ppt, which significantly undermines efforts to safeguard our communities from this persistent chemical. By aligning Hawaii's EAL for PFBS with the EPA's more protective MCL, SB539 will ensure that residents are better shielded from the adverse health effects associated with PFBS exposure.

PFBS (Perfluorobutane sulfonate) is used in many of the same types of products as PFOA and PFOS due to its water, grease, and stain-repellent properties. Some common products that contain PFBS include:

- **Food packaging materials**: Such as greaseproof paper, fast-food wrappers, and pizza boxes
- **Firefighting foam**: Used for extinguishing flammable liquid fires

- **Non-stick cookware**: Like Teflon and other non-stick coatings
- **Stain-resistant fabrics**: Used in upholstery, carpets, and clothing
- **Waterproof clothing**: Such as rain jackets and outdoor gear
- **Cleaning products**: Certain household cleaners and detergents
- **Personal care products**: Some cosmetics, creams, and sunscreens

The Environmental Caucus believes that SB 539 aligns with our commitment to preserving and restoring the environment for current and future generations. We urge the Committees to support this important legislation and take a stand against the use of toxic chemicals that endanger our health and natural resources.

Thank you very much for considering our testimony. Mahalo nui loa!

Melodie Aduja and Alan Burdick
Co-chairs, Environmental Caucus of the
Democratic Party of Hawai‘i

Hawaii Environmental Action Levels - In parts per trillion, ppt.

| Compound | EAL-12/22 | EAL-4/23 | EAL-4/24 | EAL-11/24 |
|---|---|---|---|---|
| PFBS | 600 | 1,700 | 2,000 | 2,000 |
| PFHxS | 40 | 77 | 10 | 10 |
| PFHpS | 20 | 38 | 38 | 38 |
| PFOS | 4 | 7.7 | 4 | 4 |
| PFDS | 20 | 38 | 38 | 38 |
| PFBA | 7,600 | 15,000 | 15,000 | 15,000 |
| PFPeA | 800 | 1,500 | 1,500 | 1,500 |
| PFHxA | 1,000 | 1,900 | 1,900 | 1,900 |
| PFHpA | 40 | 77 | 77 | 77 |
| PFOA | 6 | 12 | 4 | 4 |
| PFNA | 6 | 12 | 10 | 10 |
| PFDA | 4 | 7.7 | 7.7 | 7.7 |
| PFUnDA | 10 | 19 | 19 | 19 |
| PFDoDA | 13 | 26 | 26 | 26 |
| PFTrDA | 13 | 26 | 26 | 26 |
| PFTeDA | 130 | 260 | 260 | 260 |
| PFOSA | 24 | 46 | 46 | 46 |
| HFPO-DA | 6 | 12 | 10 | 10 |
| 6:2 FTS | 780 | 1,500 | 1,500 | 1,500 |
| ADONA | ---- | 1,200 | 1,200 | 1,200 |
| PFPeS | ---- | ---- | ---- | 580 |
| 6:2 FTOH | ---- | ---- | ---- | 5,000 |
| 8:2 FTOH | ---- | ---- | ---- | 4,200 |
| 6:2 FTTAoS | ---- | ---- | ---- | 1,900 |

See Table A for the Dec., 2022 EAL's. (HIDOH)
See Table A for the April, 2023 EAL's. (HIDOH)
See Table A for the April, 2024 EAL's. (HIDOH)
See Table A for the November, 2024 EAL's. (HIDOH)

**Environmental Protection Agency Maximum Contaminant Leves (MCL) – In parts per trillion, ppt.**

- **PFBS**: 4 ppt
- **PFHxS**: 10 ppt
- **PFHpS**: Not specifically listed
- **PFDS**: Not specifically listed
- **PFBA**: Not specifically listed

- **PFPeA**: Not specifically listed
- **PFHxA**: Not specifically listed
- **PFHpA**: Not specifically listed
- **PFNA**: 10 ppt
- **PFDA**: Not specifically listed
- **PFUnDA**: Not specifically listed
- **PFDoDA**: Not specifically listed
- **PFTrDA**: Not specifically listed
- **PFTeDA**: Not specifically listed
- **PFOSA**: Not specifically listed
- **HFPO-DA (GenX)**: 10 ppt
- **6:2 FTS**: Not specifically listed
- **ADONA**: Not specifically listed
- **PFPsS**: Not specifically listed
- **6:2 FTOH**: Not specifically listed

**SB-539**
Submitted on: 2/6/2025 3:35:34 PM
Testimony for AEN on 2/11/2025 3:10:00 PM

| Submitted By | Organization | Testifier Position | Testify |
|---|---|---|---|
| Colehour Bondera | Individual | Support | Written Testimony Only |

Comments:

Aloha Chair and Committee Mermbers:

As a long-time small-scale farmer in Kona, I ask that you support this legislation.

Hawaii must work to protect our fragile ecosystem. We must consider long-term and off-site impacts of chemical use.

The state can and should lead to protect the people and the enviroment in all good care decision making.

Please support this legislation.

Colehour Bondera

KALANANI OHANA FARM

Honaunau, Hawaii

**SB-539**
Submitted on: 2/10/2025 8:41:21 AM
Testimony for AEN on 2/11/2025 3:10:00 PM

| Submitted By | Organization | Testifier Position | Testify |
|---|---|---|---|
| Jamie Simic | Individual | Support | Remotely Via Zoom |

Comments:

Defending Sacred Water: Protects Oahu's sole-source aquifer, the lifeblood of our community, from further contamination and harm.

Accountability for Generations: Ensures that the Navy and government fulfill their responsibility to restore andprotect our water for future generations

Healing the Land: Addresses decades of contamination by cleaning up 1.94 million gallons of leaked fuel, safeguarding ecosystems and public health,

Transparency and Action: Establishes leadership for community-centered solutions, public education, and transparent progress reporting,

Empowering Our Future: Creates resources to monitor and rehabilitate water systems, prioritizing the health of the people and the environment.

United Stewardship: Calls for federal, state, andcommunity collaboration to honor and protect water as a sacred trust and prevent future disasters

**SB-539**
Submitted on: 2/9/2025 3:34:44 PM
Testimony for AEN on 2/11/2025 3:10:00 PM

| Submitted By | Organization | Testifier Position | Testify |
|---|---|---|---|
| Sherry Pollack | Individual | Support | Written Testimony Only |

Comments:

I strongly support SB539 that requires state agencies that monitor environmental toxins and pollutants to establish environmental action levels (EALs) to ensure the preservation of a safe environment, prohibit modifications to EALs unless certain procedural requirements are met. This measure further establishes a process to allow any resident to petition for modifications to an established EAL.

EALs must be scientifically justifiable and based on the severity of risks to human health and the environment, as well as the probability of adverse effects. The discrepancy between DOH and EPA's EALs for PFAS ("forever chemicals") is an alarming case in point as to the need for this measure, and for EALs to be based on science and the precautionary principle. The fact that the DOH's EAL for PFOS is 70ppt and the EPA's EAL is 4ppt says it all.

Additionally, individuals who have been exposed to petroleum hydrocarbons as the result of the Navy's negligence at Red Hill are reporting severe symptoms at levels much lower that the DOH's EAL for this toxic substance. This is an unacceptable and serious public health concern that must be addressed. SB539 would help to do so.

SB539 is a much-needed measure towards the protection of the health and environment of the people of Hawaii. I urge you to pass SB539.

**SB-539**
Submitted on: 2/10/2025 11:03:12 AM
Testimony for AEN on 2/11/2025 3:10:00 PM

| Submitted By | Organization | Testifier Position | Testify |
|---|---|---|---|
| Rosalie Luo | Individual | Support | Written Testimony Only |

Comments:

Aloha Chair Gabbard, Vice-Chair Richards, and Members of the Committee on Agriculture and Environment,

My name is Rosalie Luo, and I STRONGLY SUPPORT SB539, which ensures transparency, public accountability, and scientific rigor in the establishment and modification of Environmental Action Levels (EALs) for pollutants in Hawai‘i. This bill is crucial for aligning local environmental standards with the best available science and federal guidelines, protecting both public health and the environment.

Currently, Hawai‘i’s Environmental Action Levels (EALs) for some of the most toxic substances differ significantly from federal standards, posing potential health risks. For example, the EAL for PFOS and PFOA in drinking water is 70 parts per trillion (ppt), while the U.S. Environmental Protection Agency (EPA) recently set a maximum contaminant level (MCL) for both PFOS and PFOA at only 4 ppt. Such discrepancies underscore the need for alignment between state and federal standards to ensure the health and safety of Hawai‘i’s residents.

The bill also highlights total petroleum hydrocarbons (TPH) in drinking water, where the current EALs are:

- 100 parts per billion (ppb) for TPH-G (gasoline range organics),
- 266 ppb for TPH-D (diesel range organics), and
- 500 ppb for TPH-O (oil range organics).

However, documented cases show that individuals are experiencing adverse health symptoms at levels as low as 35 to 40 ppb, suggesting that current thresholds may not be sufficiently protective.

Dioxins and furans, highly toxic pollutants known for their persistence and bioaccumulation in the environment, also require careful monitoring. The EALs for these are designed to protect human health by minimizing exposure to these dangerous compounds, but any modification of such thresholds should be based on the latest scientific evidence and subject to public input and transparency.

SB539 establishes critical procedural and substantive requirements for setting and modifying EALs, ensuring that:

1. All modifications are scientifically justified and consistent with best practices.
2. The public receives adequate advance notice, along with the scientific justification for any proposed change.
3. A formal public comment period and public hearings are conducted to allow community input.
4. Residents have the right to petition state agencies to modify existing EALs, promoting community engagement and accountability.

This bill empowers the public with greater transparency and oversight, making certain that environmental protections are based on the most current scientific knowledge and aligned with federal standards.

I urge you to PASS SB539 to safeguard Hawai‘i’s environment, public health, and the well-being of future generations.

Mahalo for your consideration and leadership.

Sincerely,
Rosalie Luo