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STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

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DEPUTY DIRECTOR - WATER

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CONSERVATION AND COASTAL LANDS  
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FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
RYAN K.P. KANAKA'OLE  
Acting Chairperson

Before the House Committee on  
ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, March 17, 2026  
9:15 AM

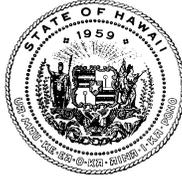
State Capitol, Conference Room 325

In consideration of  
SENATE BILL 2096, SENATE DRAFT 2  
RELATING TO WASTEWATER MANAGEMENT

Senate Bill 2096, Senate Draft 2 proposes to require certain wastewater treatment works to test sewage sludge and any other residual material for the presence of perfluoroalkyl and polyfluoroalkyl substances (PFAS); to require the Department of Health to adopt administrative rules for the monitoring, sampling, testing, and data collection of sewage sludge and other residual material that contain specific amounts of PFAS; and to prohibit the issuance or renewal of permits if testing yields PFAS in sewage sludge or other residual material on land used for agronomic purposes, on land where drainage tiles have been installed, on land that drains into waters of the State, or land in a five hundred-year floodplain. **The Department of Land and Natural Resources supports this bill.**

PFAS are known as “forever chemicals” because they do not break down easily in the environment. PFAS pose severe risks to marine life by bioaccumulating in tissues and magnifying up the food chain, causing immune system suppression, reproductive failure, and hormonal disruption in marine species like dolphins, whales, seals, and fish. PFAS enter the marine environment through a variety of ways, including agricultural runoff. Rainwater washes PFAS from contaminated sites, such as agricultural fields (where sewage sludge and biosolids are used as fertilizer), into streams and rivers that flow into the ocean. This measure would help to reduce the amount of PFAS entering the marine environment, thereby reducing harmful impacts to marine life.

Mahalo for the opportunity to comment on this measure.



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
P. O. Box 3378  
Honolulu, HI 96801-3378  
doh.testimony@doh.hawaii.gov

**Testimony COMMENTING on SB2096 SD2  
RELATING TO WASTEWATER MANAGEMENT.**

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

Hearing Date, Time and Room Number: 03/17/2026, 9:15 am, 325

1 **Fiscal Implications:** Undetermined.

2 **Department Position:** The Department of Health (“Department”) offers comments and  
3 proposed amendments.

4 **Department Testimony:** The Environmental Management Division, Wastewater Branch (“EMD-  
5 WWB”) provides the following testimony on behalf of the Department.

6 The Department supports the intent of this proposed measure. However, at this time  
7 there are no federal wastewater and sludge regulations for perfluoroalkyl and polyfluoroalkyl  
8 substances (“PFAS”). The U.S. Environmental Protection Agency (“EPA”) has taken steps  
9 towards PFAS restrictions, remediation, and research and has outlined its three (3) year plan in  
10 the EPA’s PFAS Strategic Roadmap: Three Years of Progress.<sup>1</sup>

11 On January 14, 2025, the EPA released the Draft Sewage Sludge Risk Assessment for  
12 Perfluorooctanoic Acid (“PFOA”) and Perfluorooctane Sulfonic Acid (“PFOS”) for public  
13 comment<sup>2</sup>. The draft risk assessment reflects the agency’s latest scientific understanding of the

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<sup>1</sup> [https://www.epa.gov/system/files/documents/2024-11/epas-pfas-strategic-roadmap-2024\\_508.pdf](https://www.epa.gov/system/files/documents/2024-11/epas-pfas-strategic-roadmap-2024_508.pdf)

<sup>2</sup> <https://www.epa.gov/biosolids/draft-sewage-sludge-risk-assessment-perfluorooctanoic-acid-pfoa-and-perfluorooctane>

1 potential risks to human health and the environment posed by the presence of PFOA and PFOS  
2 in sewage sludge that is land applied as a soil conditioner or fertilizer (on agricultural, forested,  
3 and other lands), surface disposed (e.g., placed in a sewage sludge-only landfill called a  
4 monofill), or incinerated. The public comment period ended on August 14, 2025.

5 The Department's Hazard Evaluation and Emergency Response Office has taken action  
6 to better understand PFAS in Hawai'i, including initial work to characterize PFAS in wastewater  
7 effluent and biosolids<sup>3</sup>.

8 The Department supports monitoring, sampling, testing, and data collection of  
9 wastewater sludge intended for land application for PFAS. However, without wastewater-  
10 specific PFAS regulation or guidance from the EPA, the Department will need time to gather  
11 data in order to possibly manage a pilot study to evaluate and determine appropriate limits for  
12 rules.

13 **Offered Amendments:** The Department respectfully recommends deleting Section 4 of the  
14 measure (Page 2, line 11 through Page 3, line 17) until there is greater clarity on regulatory  
15 standards.

16 Thank you for the opportunity to testify on this measure.

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<sup>3</sup> <https://health.hawaii.gov/heer/environmental-health/highlighted-projects/pfas/>



# Environmental Caucus of The Democratic Party of Hawai'i

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**TESTIMONY OF THE ENVIRONMENTAL CAUCUS OF THE DEMOCRATIC PARTY  
OF HAWAI'I IN SUPPORT OF SB2096 SD2, WITH AMENDMENTS Relating to  
Wastewater Management  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION (EEP)**

**Rep. Nicole E. Lowen, Chair**

**Rep. Amy A. Perruso, Vice Chair**

**DATE: Tuesday, March 17, 2026**

**TIME: 9:15 AM**

**PLACE: Conference Room 325 & Videoconference**

Aloha Chair Lowen, Vice Chair Perruso, and Members of the Committee,

The Environmental Caucus of the Democratic Party of Hawai'i supports SB2096 SD2, which strengthens Hawai'i's wastewater management framework by requiring PFAS testing at wastewater treatment works that land-apply sewage sludge and other residual materials. PFAS contamination poses significant risks to public health, drinking water, soils, and ecosystems, and this measure takes an important step toward preventing the spread of PFAS through land-application practices.

SB2096 SD2 amends Chapter 342D, Hawai'i Revised Statutes, to:

- Require wastewater treatment works approved for land application to test sewage sludge and residual materials for PFAS (Section 1).
- Add a statutory definition of PFAS consistent with section 321-601 (Section 2).
- Require the Department of Health to adopt rules for monitoring, sampling, testing, and data collection of PFAS in sewage sludge and residual materials (Section 3).
- Prohibit permits from authorizing land application of sewage sludge or residual materials containing any amount of PFAS on agronomic lands, lands with drainage tiles, lands draining into state waters, or lands within a 500-year floodplain (Section 4).

These provisions are essential to preventing PFAS from entering soils, groundwater, and food systems through biosolids application.

## Requested Amendments to Strengthen SB2096 SD2

The Caucus respectfully requests targeted amendments to ensure that SB2096 SD2 provides a complete and enforceable PFAS protection framework. While the bill establishes essential testing and permitting requirements, several critical components remain unaddressed in statute and must be added to prevent gaps in implementation:

1. Public access to PFAS testing results — The bill requires testing but does not require disclosure. Communities, farmers, and downstream water users must have timely access to PFAS data to make informed decisions about land use, crop safety, and water protection.
2. Minimum analytical standards for PFAS testing — The bill directs DOH to adopt rules for monitoring and testing but does not specify the sensitivity or scope of required methods. Establishing minimum analytical standards ensures that testing captures the full range of PFAS compounds using the most sensitive and scientifically validated methods available.
3. Clear thresholds, response actions, and disposal requirements for PFAS-contaminated sludge — The bill prohibits land application when PFAS is detected but does not address what must happen *after* contamination is identified. DOH rulemaking must include enforceable thresholds, required response actions, and safe disposal or treatment pathways to prevent contaminated sludge from being diverted to other vulnerable locations.

These amendments strengthen the bill's protective intent, ensure transparency, and provide DOH with the clear statutory direction needed to prevent PFAS from entering Hawai'i's soils, groundwater, and food systems.

Mahalo for the opportunity to testify.

Alan B. Burdick, Co-chair burdick808@gmail.com  
Mike Ewall, Co-chair mike@energyjustice.net  
Melodie Aduja, Co-chair emerita legislativepriorities@gmail.com  
Environmental Caucus Democratic Party of Hawai'i



March 13, 2026

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

**From:** Lindsay Stovall  
Director, State and Regulatory Affairs  
American Chemistry Council

**RE: SB 2096 SD 2 (Relating to Wastewater Management) – Comments/Amendment Request**

The American Chemistry Council (ACC) appreciates the opportunity to submit comments and an amendment request regarding SB 2096 SD2, which would require certain wastewater treatment facilities to test sewage sludge and other residual materials for PFAS, direct the Department of Health to adopt rules for monitoring and testing, and prohibit the issuance or renewal of permits for the land application of sludge if PFAS are detected in specified locations.

ACC respectfully encourages consideration of a more structured, science-based framework for managing PFAS in biosolids that balances environmental protection with the continued beneficial reuse of treated materials. One potential approach is to incorporate a tiered oversight program that relies on testing, data evaluation, and risk-based thresholds to guide management decisions rather than broadly prohibiting land application when PFAS are detected. A model for such an approach can be found in the biosolids PFAS oversight program developed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), which provides a transparent and adaptable system for monitoring, managing, and mitigating potential PFAS risks.

Adopting a structured, evidence-based biosolids PFAS oversight program similar to the one implemented by EGLE would allow Hawaii to proactively manage PFAS risks while preserving the beneficial use of biosolids. Michigan's approach is grounded in its *Land Application of Biosolids Containing PFAS Interim Strategy*, first implemented in 2021 and refined in 2022 and 2024, which requires wastewater treatment plants to conduct PFAS sampling prior to land application and establishes clear thresholds for allowable PFOS and PFOA concentrations. By basing management decisions on analytical data, EGLE's strategy helps identify biosolids from facilities affected by industrial PFAS sources and restricts or prohibits their land application where necessary—preventing additional environmental accumulation while allowing continued agricultural use where risks are low.

A tiered regulatory structure modeled on Michigan's system would provide Hawaii with a scientifically defensible and adaptable framework. Under EGLE's current policy, biosolids are subject to land application requirements that become more stringent as PFAS concentrations increase, combining source investigation, mandatory notifications, and conditional use restrictions to manage potential impacts. This approach allows the state to focus regulatory resources on higher risk biosolids while maintaining flexibility for safer materials that fall below threshold concentrations. Michigan's data also demonstrates that PFAS can be present even in systems without major industrial users, underscoring the importance of universal biosolids testing. A Hawaii program built on this model would strengthen environmental protection, improve transparency for farmers and landowners, and support the continued beneficial reuse of biosolids without unnecessarily increasing PFAS burdens in soils or groundwater.

To accomplish this change, ACC suggests the following amendments:

In Section 2, replace the following language:

“provided that if testing conducted pursuant to section 342D yields any amount of perfluoroalkyl and polyfluoroalkyl substances in sewage sludge or any other residual material, a permit shall not authorize the land application of that sewage sludge or other residual material on land used for agronomic purposes, on land where drainage tiles have been installed, on land that drains into waters of the State, or lands in a five hundred-year floodplain.”

With the below language:

“provided that if testing conducted pursuant to section 342D yields results for PFOS and PFOA in sewage sludge or any other residual material, permits for land application shall be structured in accordance with the following tiers:”

#### **Tiered Biosolids PFAS Management Framework**

##### **Exceptional Quality**

- Combined PFOS and PFOA below 20 ppb
- Sample finished biosolids product quarterly

##### **Below 20 ppb**

- Notify landowner and/or farmer of PFAS results

##### **Between 20 ppb and 100 ppb**

- Notify landowner and/or farmer of PFAS results
- Reduce application rate to a maximum of 1.5 dry tons per acre, or submit an alternative risk mitigation strategy
- Sample facility discharge within 30 days
- Implement a source reduction plan

##### **Greater than 100 ppb (industrially impacted)**

- Land application prohibited
- Sample facility discharge within 30 days
- Implement a source reduction plan

For the reasons outlined above, ACC respectfully **urges you to consider incorporating these changes into SB 2096 SD 2**. Thank you in advance for considering our views. If you have any questions or comments or would like to discuss these proposed changes further, please do not hesitate to contact me at 916-448-2581 or via email at [Lindsay\\_Stovall@americanchemistry.com](mailto:Lindsay_Stovall@americanchemistry.com). You may also contact ACC’s Hawaii based representative Ross Yamasaki at 808-531-4551 or via email at [ryamasaki@808cch.com](mailto:ryamasaki@808cch.com).

**SB-2096-SD-2**

Submitted on: 3/12/2026 4:25:50 PM

Testimony for EEP on 3/17/2026 9:15:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Johnnie-Mae L. Perry	Individual	Support	Written Testimony Only

Comments:

I, Johnnie-Mae L. Perry, Support

2096 SB RELATING TO WASTEWATER MANAGEMENT

**SB-2096-SD-2**

Submitted on: 3/12/2026 4:26:54 PM

Testimony for EEP on 3/17/2026 9:15:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
William Caron	Individual	Support	Written Testimony Only

Comments:

Aloha Chair, Vice Chair and Members of the Committee,

I am writing today to express my strong support for SB2096, which would require testing of sewage sludge for the presence of PFAS—toxic "forever chemicals"—and prohibit the land application of contaminated sludge in sensitive areas.

This bill is a common-sense public health measure that should have been law years ago.

PFAS are a class of synthetic chemicals used in everything from nonstick cookware to firefighting foam. They are called "forever chemicals" because they do not break down in the environment. They accumulate in our soil, our water, and our bodies. And they have been linked to cancer, liver damage, thyroid disease, and developmental harm.

Yet despite these known risks, Hawai‘i currently has no systematic requirement to test sewage sludge for PFAS before it is spread on land. That means we could be applying contaminated material to farms, pastures, and other agricultural areas—places where food is grown, and where water flows into our streams and ocean.

SB2096 fixes this by requiring wastewater treatment works that land-apply sludge to test for PFAS. It directs the Department of Health to adopt rules for monitoring, sampling, and data collection. And most importantly, it prohibits permits for land application if PFAS is detected on:

- Land used for agronomic purposes (farming)
- Land with drainage tiles
- Land that drains into state waters
- Land in a 500-year floodplain

These are precisely the places where contamination poses the greatest risk to public health and the environment. If we know PFAS is present, we should not be spreading it on ground that grows our food or drains into our reefs.

I understand that some may worry about the cost of testing or the burden on wastewater treatment facilities. But those costs are minimal compared to the price of inaction. Once PFAS contaminates soil and groundwater, it is nearly impossible to remediate. The contamination is

permanent. The health impacts are irreversible. And the liability—both financial and moral—will fall on taxpayers and communities for generations.

Protecting our communities from toxic chemicals is not a partisan issue—it is a basic responsibility of government.

I urge this committee to pass SB2096. Let us be proactive rather than reactive. Let us test before we contaminate, not after. Our 'āina, our wai, and our keiki deserve nothing less.

Mahalo for the opportunity to testify.

**SB-2096-SD-2**

Submitted on: 3/12/2026 10:36:42 PM

Testimony for EEP on 3/17/2026 9:15:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Sherry Pollack	Individual	Support	Written Testimony Only

Comments:

I strongly support SB2096 SD2 that requires certain wastewater treatment works to test sewage sludge and any other residual material for the presence of PFAS. This measure further requires the Department of Health to adopt administrative rules for the monitoring, sampling, testing, and data collection of sewage sludge and other residual material that contain specific amounts of PFAS, and prohibits the issuance or renewal of permits if testing yields PFAS in sewage sludge or other residual material on land used for agronomic purposes, on land where drainage tiles have been installed, on land that drains into waters of the State, or land in a 500-year floodplain.

Oahu is already suffering from the contamination of these “forever-chemicals” due to the Navy’s criminal negligence at Red Hill. Testing for PFAS is crucial because "forever chemicals" are linked to serious health concerns like cancer, developmental issues, and immune system dysfunction, making it vital to monitor. Please pass this important measure.

**SB-2096-SD-2**

Submitted on: 3/13/2026 4:51:05 PM

Testimony for EEP on 3/17/2026 9:15:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Lowen & Peruso and committee members. While we are only in the early stages of learning the horrors of how PFAS chemicals affect our bodies, there is already ample evidence that food grown on lands treated with sewage sludge containing PFAS is correlated with significantly higher rates of cancer and other diseases. I believe that it is wise and prudent to be as proactive as possible in protecting our citizens from this threat. I urge you to pass SB2096.

To: Representative Nicole E. Lowen, Chair  
Representative Amy A. Perruso, Vice Chair  
Committee on Energy & Environmental Protection

From: Veronica Moore, Individual Citizen

Date: March 15, 2026

RE: Senate Bill 2096 SD2  
Measure Title: RELATING TO WASTEWATER MANAGEMENT.  
Report Title: DOH; Perfluoroalkyl and Polyfluoroalkyl Substances; PFAS;  
Wastewater Management; Testing; Rules; Permits; Prohibition

To All Concerned,

My name is Veronica Moore and I support Senate Bill 2096 SD2. Thank you for your consideration.

Sincerely,

Veronica M. Moore