

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

CIARA W.K. KAHAHANE
DEPUTY DIRECTOR - WATER

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STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
P.O. BOX 621
HONOLULU, HAWAII 96809

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

**Before the Senate Committees on
AGRICULTURE AND ENVIRONMENT
and
HEALTH AND HUMAN SERVICES**

**Monday, February 2, 2026
3:00 PM
State Capitol, Conference Room 224 & Videoconference**

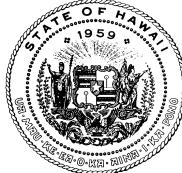
**In consideration of
SENATE BILL 2096
RELATING TO WASTEWATER MANAGEMENT**

Senate Bill 2096 proposes to require certain wastewater treatment plants 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 safe disposal and sequestration 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.

JOSH GREEN, M.D.
GOVERNOR OF HAWAII
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAII



KENNETH S. FINK, MD, MGA, MPH
DIRECTOR OF HEALTH
KA LUNA HO'OKELA

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

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

SENATOR JOY A. SAN BUENAVENTURA, CHAIR
SENATE COMMITTEE ON HEALTH AND HUMAN SERVICES

SENATOR MIKE GABBARD, CHAIR
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Hearing Date, Time and Room Number: 02/02/2026, 3:00 pm, 224

- 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-WWB") provides the following testimony on behalf of the Department.
- 5 The Department supports the intent of this proposed measure. However, at this time
- 6 there are no federal wastewater and sludge regulations for perfluoroalkyl and polyfluoroalkyl
- 7 substances ("PFAS"). The U.S. Environmental Protection Agency ("EPA") has taken steps
- 8 towards PFAS restrictions, remediation, and research and has outlined their three (3) year plan
- 9 in the EPA's PFAS Strategic Roadmap: Three Years of Progress¹
- 10 On January 14, 2025, the EPA released the Draft Sewage Sludge Risk Assessment for
- 11 Perfluorooctanoic Acid ("PFOA") and Perfluorooctane Sulfonic Acid ("PFOS") for public

¹ https://www.epa.gov/system/files/documents/2024-11/epas-pfas-strategic-roadmap-2024_508.pdf

1 comment². The draft risk assessment reflects the agency's latest scientific understanding of the
2 potential risks to human health and the environment posed by the presence of PFOA and PFOS
3 in sewage sludge that is land applied as a soil conditioner or fertilizer (on agricultural, forested,
4 and other lands), surface disposed (e.g., placed in a sewage sludge-only landfill called a
5 monofill), or incinerated. The public comment period ended on August 14, 2025.

6 The Department's Hazard Evaluation and Emergency Response Office has taken action
7 to better understand PFAS in Hawai'i, including initial work to characterize PFAS in wastewater
8 effluent and biosolids³.

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

14 **Offered Amendments:** Amendments offered below only reference sections or portions of the
15 measure where we are making recommendations for revision. We have highlighted text where
16 we are recommending replacement or addition. If we are recommending deletion of any
17 amendments in this measure, we have either stated the deletion or struck through the text. All
18 other amendments are unchanged.

19 SECTION 1, page 1, lines 4-9: “**§342D- Testing for perfluoroalkyl and polyfluoroalkyl**
20 **substances.** A wastewater treatment works that has been approved for land application of its
21 sewage sludge shall test sewage sludge and any other residual material that is intended for land
22 application for the presence of perfluoroalkyl and polyfluoroalkyl substances.”

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

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

1 SECTION 3, page 2, lines 1-10: “[§342D-5] **Rules; specific.** The director may establish
2 by rule, water quality standards, effluent standards, treatment and pretreatment standards,
3 and standards of performance for specific areas and types of discharges in the control of water
4 pollution, thereby allowing for varying local conditions[.]; provided that the director shall adopt
5 rules providing for the monitoring, sampling, testing, and data collection of sewage sludge and
6 other residual materials accumulated at a wastewater treatment works that contain [any
7 amount of] perfluoroalkyl and polyfluoroalkyl substances.”

8 SECTION 4. The Department recommends deleting Section 4 of the measure (Page 2,
9 line 11 through Page 3, line 17).

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



February 2, 2026

To: Senate Committee on Health and Human Services Chair Joy A. San Buenaventura and Vice Chair Angus L.K. McKelvey, as well as the Senate Committee on Agriculture and Environment Chair Mike Gabbard and Vice Chair Herbert M. Richards, III, along with committee members

Subject: **SB 2096**, Relating to Wastewater Management

Aloha,

I am writing in support of **SB 2096**. This measure tests for PFAS-contaminated sewage sludge in order to prevent perfluoroalkyl and polyfluoroalkyl substances from being spread across 'āina – in 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. This bill would require the testing and safer disposal of such contaminated material to protect water, soil, and public health in Hawai'i. Furthermore, this measure clearly defines PFAS, requires updates to wastewater permits, mandates safe handling of contaminated sludge, and bans land application if PFAS is found.

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are associated with a variety of serious health effects, including developmental delays, reproductive harm, increased risk of certain cancers, and increased risk of obesity. While the Environmental Protection Agency has already conducted extensive research to understand the harmful effects of PFAS, some of the long-lasting effects remain unknown due to their persistence in the environment and the human body.

PFAS are entirely man-made chemicals and do not occur naturally. Therefore, it is the responsibility of the State to enact strong safeguards to prevent these toxic substances from entering our drinking water, agricultural soils, and food system. Additionally, we must protect farmers, the core of our food system, from the occupational hazards associated with PFAS exposure.

Therefore, I urge this joint committee to pass **SB 2096** to prevent PFAS contamination and protect the long-term health of Hawai'i's people, environment, and food system.

Mahalo,
Brandon Kindard & the Food+ Policy Team
#fixourfoodsystem

The Food+ Policy Internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2026, the cohort of interns are undergraduate and graduate students and young professionals working in the food system. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.



To: The Honorable Senator Mike Gabbard and Joy San Buenaventura, Chairs, the Honorable Herbert M. "Tim" Richards and Angus McKelvey, Vice Chairs, and Members of the Agriculture and Environment and Health and Human Services Committees.

From: Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

Re: Hearing SB2096 RELATING TO WASTEWATER MANAGEMENT

Hearing: Monday February 29, 2026 3:00 p.m.

Aloha Chairs Gabbard and San Buenaventura, Vice Chairs Richards and McKelvey, and Members of the Agriculture and Environment and Health and Human Services Committees!

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.

The Hawai'i Reef and Ocean Coalition **supports the intent of SB2243**, but **COMMENTS** about aspects of the bill.

The Hawai'i Reef and Ocean Coalition appreciates the bill's recognition of the threat presented by perfluoroalkyl and polyfluoralkyl substances (PFAS). Hawai'i Reef and Ocean Coalition **supports the requirement that the Department of Health (DOH) adopt rules providing for the safe disposal and sequestration of sewage sludge**.

The bill does not define what is meant by "other residuals." Also, do the bill's requirements extend to all wastewater reuse as well? Wastewater reuse may be a vital resource for fire control and some non-food irrigation if it can be made free of harmful PFAS. These issues need to be resolved.

Thank you for the opportunity to testify.

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

LATE



Environmental Caucus of The Democratic Party of Hawai'i

TESTIMONY IN STRONG SUPPORT OF SB2096 Relating to Wastewater Management

TO: Chair Joy A. San Buenaventura, Vice Chair Henry Aquino, and Members of the Senate Committee on Health and Human Services (HHS)

and

Chair Mike Gabbard, Vice Chair Herbert M. "Tim" Richards III, and Members of the Senate Committee on Agriculture and Environment (AEN)

Hearing: February 2, 2026 – 3:00 PM – Conference Room 224 & Videoconference

Aloha Chairs San Buenaventura and Gabbard, Vice Chairs Aquino and Richards, and Members of the Committees,

The Environmental Caucus of the Democratic Party of Hawai'i strongly supports SB2096, which establishes essential safeguards to prevent the spread of PFAS contamination through wastewater treatment systems, sewage sludge, and other residual materials.

Why SB2096 Is Critically Needed

PFAS—per- and polyfluoroalkyl substances—are persistent, bioaccumulative, and toxic chemicals known as “forever chemicals.” They do not break down in the environment and can accumulate in soil, crops, livestock, and human bodies. Wastewater treatment plants are a major pathway through which PFAS enter the environment, because PFAS-contaminated influent becomes concentrated in sewage sludge and biosolids.

Without mandatory testing and strict disposal rules, PFAS-laden sludge can be unknowingly applied to agricultural lands, floodplains, and areas that drain into streams, wetlands, and drinking-water sources. This has already caused widespread contamination in multiple states, leading to crop destruction, livestock poisoning, and long-term groundwater impairment.

Hawai'i must not repeat these mistakes.

What SB 2096 Accomplishes

SB2096 provides a comprehensive, science-based framework to protect Hawai'i's environment and public health by:

1. Requiring PFAS testing of sewage sludge and residual materials

This ensures that wastewater treatment plants identify PFAS contamination before sludge is reused, sold, or disposed of.

2. Directing the Department of Health to adopt rules for safe disposal and sequestration

PFAS-contaminated sludge must be handled with the highest level of caution. DOH rulemaking will ensure that disposal methods prevent leaching, runoff, or re-release into the environment.

3. Prohibiting permits for land application when PFAS is detected

The bill wisely prohibits the issuance or renewal of permits for the land application of sludge containing PFAS on agricultural lands, on lands with drainage tiles, on lands that drain into waters of the State, and within 500-year floodplains.

These commonsense restrictions reflect national best practices and are essential to preventing PFAS-laden sludge from contaminating Hawai'i's food systems, waterways, and groundwater.

Protecting Hawai'i's Food, Water, and Communities

PFAS contamination is extraordinarily difficult and costly to remediate once it enters soil or groundwater, making prevention the only truly effective strategy. SB2096 strengthens this preventive approach by ensuring the protection of Hawai'i's agricultural lands and food supply, safeguarding streams, wetlands, and coastal waters, preserving drinking water sources, and upholding public health—especially for children and pregnant women, who are most vulnerable to toxic exposures.

This bill represents a prudent, proactive measure that aligns Hawai'i with emerging national standards and reflects our collective responsibility to safeguard the environment and the well-being of future generations.

Conclusion

SB2096 is a forward-looking, scientifically grounded bill that prevents irreversible PFAS contamination and strengthens Hawai'i's environmental and public-health protections. The Environmental Caucus of the Democratic Party of Hawai'i respectfully urges the Committees to pass SB2096.

Mahalo for the opportunity to testify.

Alan Burdick, Co-Chair

Mike Ewall, Co-Chair

Melodie Aduja, Co-Chair Emerita, Environmental Caucus Democratic Party of Hawai'i

SB-2096

Submitted on: 1/30/2026 7:15:23 PM
Testimony for HHS on 2/2/2026 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Uilani Naipo	Individual	Support	Written Testimony Only

Comments:

I support this measure.

SB-2096

Submitted on: 1/31/2026 2:35:42 PM
Testimony for HHS on 2/2/2026 3:00:00 PM

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

Comments:

I strongly support SB2096 that requires certain wastewater treatment plants to test sewage sludge and any other residual material for the presence of PFAS. This measure also requires the Department of Health to adopt administrative rules for the safe disposal and sequestration 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 five hundred-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.

LATE

SB-2096

Submitted on: 2/1/2026 8:01:15 PM
Testimony for HHS on 2/2/2026 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Marvin Heskett	Individual	Support	Written Testimony Only

Comments:

Aloha Chair and Members of the Hawai‘i HHS / AEN Committee,

As an environmental chemist with over 30 years of professional experience, I write in strong support of SB2096. Earlier in my career, I supported the beneficial reuse of wastewater byproducts as a means of recycling nutrients. However, advancements in analytical science—and the growing body of peer-reviewed research—have made it clear that biosolids and sludge generated by wastewater treatment plants contain recalcitrant chemicals that are not removed or degraded through conventional treatment processes.

Of particular concern are per- and polyfluoroalkyl substances (PFAS), which are among the most persistent and toxic of these contaminants. PFAS preferentially partition into solids during treatment, resulting in their concentration in biosolids. Numerous studies worldwide now demonstrate that nearly all domestic wastewater is impacted by PFAS contamination.

The Hawai‘i Department of Health has conducted studies at local wastewater treatment facilities that confirm Hawai‘i is not immune to this global issue. Given the persistence, bioaccumulation potential, and health risks associated with PFAS, the reuse of biosolids must be carefully regulated. SB2096 provides an appropriate and necessary framework to ensure public health and environmental protection.

I respectfully urge the committee to support the passage of SB2096.

Mahalo nui loa,

Marvin Heskett