



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

**Testimony COMMENTING on HB 1934  
RELATION TO ENVIRONMENTAL PROTECTION**

REPRESENTATIVE CHRIS LEE, CHAIR  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Hearing Date: February 15, 2018  
Time: 8:35 am

Room Number: 325

1 **Fiscal Implications:** None.

2 **Department Testimony:** The purpose of this bill is to prohibit the construction of injection  
3 wells. The Department of Health (Department) issues underground injection control permits for  
4 the discharge of sewage wastewater, treated or untreated stormwater, industrial wastewater,  
5 cooling water, aquaculture, and geothermal.

6 While the Department supports the intent of this bill, there are situations where  
7 alternative wastewater disposal options are not available, feasible, or practical. In addition, the  
8 prohibition of all injection wells would impact not only sewage discharges but the other types of  
9 discharges as well. The bill's proposed definition of an injection well includes "subsurface fluid  
10 distribution system" or leachfield which are the most commonly accepted waterwater disposal  
11 option available for areas not serviced by a central sewage treatment facility.

12 The Department recommends that the bill be amended to prohibit only sewage  
13 wastewater injection wells, not all injection wells, and where there is a feasible alternative. The  
14 Department encourages wastewater reuse, leachfields, and surface impoundments, where feasible  
15 and practical. Developers would need to show undue hardship for the construction of a  
16 wastewater injection well.

17 **Offered Amendments:**

1 Amend Section 2, regarding proposed new §342D- Injection wells prohibited by amending the  
2 proposed subsections (a) and (b) as follows:

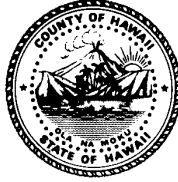
3 (a) No approval for the construction of a sewage wastewater injection well shall be  
4 issued by the department, unless alternative wastewater disposal options are not available,  
5 feasible, or practical.

6 (b) As used in this section, “injection well” means bored, drilled, or driven shaft, or a  
7 dug hole, whose depth is greater than its widest surface dimension into which subsurface  
8 disposal of fluid or fluids occurs or is intended to occur by means of injection.”

9  
10 Thank you for the opportunity to testify on this measure.

Harry Kim  
Mayor

Wilfred M. Okabe  
Managing Director



William A. Kucharski  
Director

Diane A. Noda  
Deputy Director

County of Hawai'i  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

345 Kekūanāʻo'a Street, Suite 41 · Hilo, Hawai'i 96720  
(808) 961-8083 · Fax (808) 961-8086  
cohdem@co.hawaii.hi.us

<http://www.hawaiicounty.gov/environmental-management/>

February 13, 2018

Rep. Chris Lee, Chair  
Committee on Energy & Environmental Protection  
State of Hawai'i House of Representatives  
Hawai'i State Capitol  
415 South Beretania Street  
Honolulu, Hawai'i 96813

Re: **Opposition to HB1934**  
**(Relating to Environment Protection)**

Date: February 15, 2018 (Thursday)

Time: 8:30 a.m.

Dear Chairperson Lee and Members of the Committee on Energy & Environmental Protection:

1. The County of Hawaii (COH) opposes HB1934.
2. The Bill as written would forbid all injection wells in Hawaii. This will impose inappropriate and unnecessary constraints on many legitimate operations within the State. While the description in the intent of the Bill is to stop organics from being injected into porous geologic formations, HB1934 forbids all injection wells regardless of the effluent characteristics. The ban would not allow, for example, the injection of salt water into a salt water lens. HB1934 would even forbid the reinjection of drinking water into a ground water system for future use.
3. As an example, a simple reverse osmosis (RO) technology separates salts from fresh water. The rejected waste stream contain higher levels of dissolved salt than the original water. HB1934 could make this technology economically infeasible for any industrial user within the State of Hawaii since disposal of waste streams from an RO system via an injection well is one of the most cost effective and environmentally safe alternatives available. To forbid any and all deep well injection disposal options regardless of the composition of the effluent is not recommended.

Thank you for your consideration of this testimony.

Sincerely,

A handwritten signature in black ink, appearing to read "William A. Kucharski".

William A. Kucharski, Director, Department Environmental Management, COH

**HB-1934**

Submitted on: 2/13/2018 8:46:45 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	OCC Legislative Priorities Committee, Democratic Party of Hawaii	Support	No

Comments:

**PRESENTATION OF THE  
OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES  
DEMOCRATIC PARTY OF HAWAII  
TO THE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION  
THE HOUSE OF REPRESENTATIVES  
TWENTY-NINTH LEGISLATURE  
REGULAR SESSION OF 2018  
Thursday, February 15, 2018  
8:35 a.m.**

Hawaii State Capitol, Conference Room 325

**RE: Testimony in Support** of HB 1934, RELATING TO ENVIRONMENTAL PROTECTION.

To the Honorable Chris Lee, Chair; the Honorable Nicole E. Lowen, Vice-Chair and the Members of the Committee on Energy and Environmental Protection:

Good morning. My name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") Legislative Priorities Committee of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on House Bill No 1934 relating to the prohibition against injection wells for environmental protection purposes.

The OCC Legislative Priorities Committee is in favor of House Bill No. 1934 and supports its passage as Hawaii has over six thousand six hundred injection wells. The Environmental Protection Agency recognizes an injection well as a method to place fluid underground into porous geologic formations and that it has a wide range of uses, including storing carbon dioxide and disposing of waste. Injection wells can be hazardous to the environment and pose a risk to the health and safety of the public.

House Bill No.1934 is in accord with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it prohibits the construction of injection wells.

We believe in supporting best management practices in sustaining our environment and in increased citizen involvement. We support programs that encourage sustainable clean, efficient, creative and environmentally friendly modes of transportation, recycling, and waste reduction. (Platform of DPH, P. 8, Line 413-415 (2016)).

Given that House Bill No.1934 prohibits the construction of injection wells, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

**/s/ Melodie Aduja**

Melodie Aduja, Chair, OCC Legislative Priorities Committee

Email: [legislativepriorities@gmail.com](mailto:legislativepriorities@gmail.com), Tel.: (808) 258-8889

**HB-1934**

Submitted on: 2/12/2018 4:39:22 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Benton Kealii Pang, Ph.D.	Hawaiian Civic Club of Honolulu	Support	No

Comments:

I support this bill because "Injection wells can be hazardous to the environment and pose a risk to the health and safety of the public."

**HB-1934**

Submitted on: 2/13/2018 3:40:20 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Office of Hawaiian Affairs	Individual	Support	Yes

Comments:



February 13, 2018

Honorable Chris Lee, Chair  
Honorable Nicole E. Lowen, Vice Chair  
House Committee on Energy & Environmental Protection

Hearing Date: **Thursday, February 15, 8:35 a.m., Conference Room 325**

Subject: **OPPOSE - HB 1934, Relating to Environmental Protection**

Dear Chair Lee, Vice Chair Lowen, and Members of the Committee:

As both a born-and-raised Hawaii resident, a part-Hawaiian, and the President of an engineering firm that is committed to protecting and preserving the environment and public health, I oppose HB 1934 for the reasons described below.

The bill notes that “some injection wells in the State can possibly harm the nearby local environment.” While this may be true, the vast majority of injection wells function as they were designed to and provide an important means of water and wastewater management in the State. As noted, Hawai‘i has thousands of permitted injection wells. I am concerned that the bill does not consider the many beneficial uses of injection wells. An example is the many “drywells” used for discharge of onsite storm water, which is a prescribed low-impact development approach. The bill would make it practically impossible for the use of drywells to help Hawai‘i manage stormwater and recharge our aquifers. I stress that this goes against the best management practices for low-impact development, and would not meet current EPA and HDOH requirements for stormwater management.

In addition, the bill’s definition of “injection well” is severely flawed, in that it includes the term “or a subsurface fluid distribution system.” This definition would seem to include individual wastewater treatment systems, such as septic and drain field systems, that are used by the majority of Hawaii rural residents. With no option to connect to a municipal wastewater system, these residents would suffer extreme hardship in finding a wastewater discharge alternative.

Because of these grave concerns regarding the potential negative impacts of the bill, I oppose HB1934.

Please do not hesitate to contact me if you have any questions regarding this letter.

Yours truly,  
Yogi Kwong Engineers, LLC

Jeffrey Kalani, P.E.  
President/CEO





THE LIMTIACO CONSULTING GROUP  
CIVIL ENGINEERING AND ENVIRONMENTAL CONSULTANTS

February 13, 2018

House Committee on Energy & Environmental Protection

Hearing: Wednesday, February 14, 2018, 8:35 am, Conference Room 325

Subject: Testimony in Opposition  
HB1934 Relating to Environmental Protection

Honorable Representatives Chris Lee, Chair; Nicole Lowen, Vice Chair; and Committee Members:

The Limtiaco Consulting Group (TLCG) is a local civil and environmental engineering firm and is proud to be voted one of Hawaii's Best Places to Work. TLCG is an active member of the American Council of Engineering Companies of Hawaii (ACECH) as well as other professional engineering organizations. TLCG principals believe it is important to give back to the communities we serve through beneficial engineering projects and meaningful volunteerism.

Environmental protection is one of the most important pillars in our industry. And while I believe this bill intends to protect the environment by prohibiting construction of new injection wells, injection wells serve modern communities in several ways:

- Provides onsite stormwater disposal to prevent downstream flooding and pollution of streams and beaches;
- Supports low-impact development;
- Enhances groundwater recharge; and
- Safe and economical disposal of wastewater effluent, particularly for rural residents who do not have access to municipal wastewater collection and treatment services.

Injection wells help to protect the environment; not all injection wells pollute nearshore waters as HB1934 suggests.

Thank you for an opportunity to express my concerns and mahalo for your commitment to making Hawaii a better place.

Sincerely,  
*The Limtiaco Consulting Group, Inc.*

  
John H. Katahira, P.E.  
President

February 13, 2018

Honorable Chris Lee, Chair  
Honorable Nicole E. Lowen, Vice Chair  
House Committee on Energy & Environmental Protection

Hearing Date: **Thursday, February 15, 8:35 a.m., Conference Room 325**

Subject: **OPPOSE - HB 1934, Relating to Environmental Protection**

Dear Chair Lee, Vice Chair Lowen, and Members of the Committee:

Hart Crowser is a leading environmental engineering and consulting firm, with 10 employees in Hawai'i. One of our primary business lines is stormwater consulting. We provide stormwater permitting and compliance consultation for industries, construction sites, and municipalities.

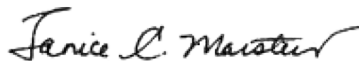
One of the best management practices in stormwater for development projects is called "low impact development" (LID). The goal of LID is to reduce runoff from a site to the same level that occurred before development. As you can imagine, this is difficult with the change from natural ground to hardscape (buildings or paved surfaces), and one of the techniques most often employed is the use of drywells. Drywells recharge stormwater back to the ground, thereby preventing runoff, as well as restoring our aquifers. Municipalities also use drywells to increase recharge of stormwater and to reduce flooding in their residential neighborhoods. The bill would prohibit the use of drywells for stormwater discharge, and would not meet current EPA and HDOH recommendations for stormwater management.

We also note that the bill's definition of prohibited injection well includes the term "or a subsurface fluid distribution system." This definition would seem to include individual wastewater treatment systems, such as septic and drain field systems that are used by the majority of Hawai'i rural residents. With no option to connect to a municipal wastewater system, these residents would suffer extreme hardship in finding a wastewater discharge alternative.

Because of these negative impacts of the bill, we oppose HB 1934.

Please do not hesitate to contact me if you have any questions regarding this letter.

Sincerely,  
**HART CROWSER, INC.**



**JANICE C. MARSTERS, PHD**  
Managing Principal, Hawai'i



AMERICAN COUNCIL OF ENGINEERING COMPANIES  
of Hawaii

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Website: [www.acechawaii.org](http://www.acechawaii.org)

February 13, 2018

Honorable Chris Lee, Chair  
Honorable Nicole E. Lowen, Vice Chair  
House Committee on Energy & Environmental Protection

Hearing Date: **Thursday, February 15, 8:35 a.m., Conference Room 325**

Subject: **OPPOSE - HB 1934, Relating to Environmental Protection**

Dear Chair Lee, Vice Chair Lowen, and Members of the Committee:

The American Council of Engineering Companies of Hawaii (ACECH) represents 70 engineering consulting firms with over 1,500 employees throughout Hawaii. Our members work to design projects that protect public health, safety and welfare, including environmental health.

The bill notes that “some injection wells in the State can possibly harm the nearby local environment.” While this may be true, the vast majority of injection wells function as they were designed to and provide an important means of water and wastewater management in the State. As noted, Hawai‘i has thousands of permitted injection wells. We are concerned that the bill does not consider the many beneficial uses of injection wells. An example is the many “drywells” used for discharge of onsite storm water, which is a prescribed low-impact development approach. The bill would make it practically impossible for the use of drywells to help Hawai‘i manage stormwater and recharge our aquifers. We stress that this goes against the best management practices for low-impact development, and would not meet current EPA and HDOH requirements for stormwater management.

In addition, the bill’s definition of “injection well” is severely flawed, in that it includes the term “or a subsurface fluid distribution system.” This definition would seem to include individual wastewater treatment systems, such as septic and drain field systems that are used by the majority of Hawai‘i rural residents. With no option to connect to a municipal wastewater system, these residents would suffer extreme hardship in finding a wastewater discharge alternative.

Because of these grave concerns regarding the potential negative impacts of the bill, we oppose HB1934.

Please do not hesitate to contact us if you have any questions regarding this letter.

## BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843  
www.boardofwatersupply.com



February 15, 2018

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair  
KAPUA SPROAT, Vice Chair  
DAVID C. HULIHEE  
KAY C. MATSUI  
RAY C. SOON

ROSS S. SASAMURA, Ex-Officio  
JADE T. BUTAY, Ex-Officio

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.  
Deputy Manager and Chief Engineer

The Honorable Chris Lee, Chair  
and Members  
Committee on Energy and Environmental Protection  
Hawaii State Capitol, Room 325  
Honolulu, Hawaii 96813

Dear Chair Yamane, Chair Lee and Members:

Subject: House Bill 1934: Relating to Environmental Protection

The Honolulu Board of Water Supply (BWS) opposes House Bill (HB) 1934 relating to environmental protection, prohibiting the construction of injection wells. The prohibition of injection well approvals will detrimentally impact viable disposal options that may be the only cost effective disposal alternative to direct ocean outfall or transport to a wastewater treatment plant.

The language in the bill is overly broad and considered an over-reach in response to the Maui wastewater injection well situation, which is site and effluent specific. Injection well approval by the State Department of Health (DOH) should continue to be evaluated on a case-by-case basis depending on the location within the established Underground Injection Control Area, types of geologic formations, depth of well casing, effluent type, flow and density, fate and transport and impacts, if any to the environment.

State DOH rules on injection wells are comprehensive and rigorous and could be re-evaluated and amended given the additional research data from the Maui wastewater injection well experience rather than a broad prohibition.

Thank you for your consideration of our testimony on HB 1934.

Very truly yours,



ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

**Testimony before the  
House Committee on Energy & Environmental Protection**

**HB 1934 - Relating to Environmental Protection  
Thursday, February 15, 2018 at 8:35 a.m.  
Conference Room 325**

**By Tony Koyamatsu  
Manager, Environmental Department  
Hawaiian Electric Company, Inc.**

Chair Lee, Vice Chair Lowen and Members of the Committee:

My name is Tony Koyamatsu. I am providing testimony on behalf of Hawaiian Electric Company and its subsidiary utilities, Maui Electric Company and Hawaii Electric Light Company (collectively referred to as "Hawaiian Electric").

House Bill 1934 (HB 1934) proposes to totally prohibit the construction of underground injection wells. Hawaiian Electric is among the thousands of injection well owners in Hawaii that use injection wells for infiltrating stormwater and other types of water into the ground. Hawaiian Electric opposes HB 1934.

Through Hawaii Administrative Rules, Title 11 Chapter 23, the Hawaii Department of Health's Underground Injection Control Program is already in-place to regulate underground injection wells for the protection of Hawaii's underground drinking water sources from contamination. Under U.S. EPA oversight, the Department of Health regulates the construction, inspection, monitoring and reporting, and has the ability to administer penalties for non-compliance.

HB 1934 proposes to amend the definition of an injection well to include "a subsurface fluid distribution system," affecting the installation of leach fields. With the elimination of even leach fields, areas without sewer infrastructure would have no option for the disposal of their sanitary waste.

Also, an unintended consequence of this bill is higher costs to process and dispose of stormwater and other types of water from facilities, leading to overall higher costs for Hawaii's consumers. The added cost would be very significant because of the large number of facilities across the State utilizing injection wells and the limited alternatives for the processing and disposal of water.

Thank you for the opportunity to testify.

**HB-1934**

Submitted on: 2/12/2018 8:40:46 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Erica Scott	Individual	Support	No

Comments:

**HB-1934**

Submitted on: 2/13/2018 1:08:19 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
mike biechler	Individual	Support	No

Comments:

Aloha mai Chair Lee and members of the House Energy and Environmental Protection Committee,

Thank you for hearing this important bill. I **STRONGLY SUPPORT** HB 1934. I hope that someday our nearshore, surface, and ground water resources will be protected to the extent I believe our Counstitution demands. This bill is a great start.

This bill has the potential to both help improve environmental conditions as well as reduce future liabilities of county approving agencies following the recent decision of the 9th circuit court in Hawaii Wildlife Fund v. County of Maui.

Please pass this bill and help our communitis protect our most valuable resource.

Mahalo,

Mike Biechler

Waialua, HI

**HB-1934**

Submitted on: 2/13/2018 1:09:41 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Laura Gray	Individual	Support	No

Comments:

Water that goes into the ground goes into the ocean, our drinking water, and our crops eventually. Nothing goes away, because our islands and earth island are closed systems. Science has moved forward since the days when we thought that you could dump waste into the ocean with pipes that you can see still to this day, relics of the past. We need to move forward and be more responsible now that we know better. Thank you for introducing this and other good bills this session. Mahalo, Laura Gray



**HB-1934**

Submitted on: 2/13/2018 2:06:41 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jennifer Homcy	Individual	Support	No

Comments:

Aloha Legislatures,

My name is Jennifer Homcy and I am in strong support of HB 1934 to ban all new deep injection wells in Hawaii. Our water sources are constantly being compromised both above and below ground. As we have learned on Maui, it is not safe to inject waste water into the ground. We depend on ground water and the natural filtration process of surface water entering our aquifers to cleanse our drinking water sources. We are also an ocean state and our coastal waters are used recreationally by millions of people annually. To risk contamination by allowing relocation of impure water to be forced into the ground is irresponsible.

With the acceleration of technology in the 21st Century we need to look towards new innovative ways to deal with waste water, rather than continue to allow practices that compromise our health and environment.

Mahalo for hearing and considering HB 1934 banning deep injection wells.

Jennifer Homcy

Haleiwa

**HB-1934**

Submitted on: 2/13/2018 2:18:42 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lucille Homcy	Individual	Support	No

Comments:

Aloha Committee Members,

I am writing in support of HB 1934 to ban any new waste water injection wells in Hawaii. Injecting waste water into the ground is counter intuitive and is not a safe and responsible way to deal with waste. Risks to our purest fresh water sources along with potential for coastal contamination are far too great and once the damage is done we can no longer take that back

Please pass HB 1934 for all of Hawaii, visitors and residents alike.

Mahalo for your consideration,

Lucille Homcy

Haleiwa

**HB-1934**

Submitted on: 2/13/2018 9:03:39 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dawn Bruns	Individual	Support	No

Comments:

**LATE**

**HB-1934**

Submitted on: 2/14/2018 3:53:23 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Peggy McArdle	Individual	Support	No

Comments: