



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. Box 3378  
HONOLULU, HAWAII 96801-3378

In reply, please refer to:  
File:

## HOUSE COMMITTEE ON WATER, LAND & OCEAN RESOURCES

### H.B. 248, RELATING TO WATER

Testimony of Chiyome Leinaala Fukino, M.D.  
Director of Health

January 30, 2009, 9:00 A.M.

1 **Department's Position:** The Department of Health opposes H.B. 248.

2 **Fiscal Implications:** None

3 **Purpose and Justification:** We oppose H.B. 248 because no single material is best suited for all  
4 conditions for the construction of public water systems, and water suppliers should not be restricted to  
5 using only polyvinyl chloride or PVC. The Department of Health Safe Drinking Water Branch currently  
6 recognizes the use of several materials to convey drinking water in public water systems. These  
7 materials are all certified under American National Standards Institute/National Sanitation Foundation  
8 Standard 61 for indirect additives. They include: copper pipe, ductile iron pipe, other plastic pipes as  
9 well as PVC.

10 The use of specific piping material depends upon many factors including: strength, durability,  
11 flexibility, expected life, size, cost and more. While PVC has advantages in some of these areas, it is not  
12 the most suitable piping material for all conditions. Furthermore, some grades of PVC are appropriate  
13 for sewers but not drinking water. The ability to select more suitable piping materials should be left to  
14 the water system designer who will better know the overall needs of the new system.

1           The Department of Health respectfully requests that this measure be held. Thank you for the  
2 opportunity to comment on this measure.

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# BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



January 29, 2009

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Deputy Manager and Chief Engineer

The Honorable Ken Ito, Chair  
and Members  
House of Representatives  
Committee on Water, Land, and Ocean Resources  
State Capitol  
Honolulu, Hawaii 96813

Dear Chair Ito and Members:

Subject: House Bill No. 248, Relating to Water

The Honolulu Board of Water Supply ("HBWS") opposes House Bill 248, which requires all potable water systems constructed after July 1, 2010 to use polyvinyl chloride ("PVC") pipe.

Although the HBWS agrees that PVC pipe has beneficial qualities, including its corrosion resistant properties, it is not always the best material for every application. Specifically, PVC pipe cannot be used for high-pressure water systems or in soil contaminated with petroleum. Thus, HBWS needs the ability to exercise sound engineering judgment to install the appropriate type of pipe for varying field conditions.

For example, during the recent Kapiolani Boulevard Water and Sewer System Improvements Project, PVC pipe was used for the majority of the project area. However, fronting the Hawaii Convention Center, metal pipe had to be used because the soil in the area was contaminated with petroleum. If the HBWS was required to use PVC in this situation, there would be a risk of petroleum permeating through the PVC pipe and contaminating the potable water system.

It is further noted that there are other pipe material with similar corrosion resistant properties, such as High-Density PolyEthylene (HDPE), that would have to be precluded from consideration should this bill pass.

Ultimately, the proposed bill would limit the ability of the HBWS to use sound engineering judgment to select the best available pipe material for varying situations.

The HBWS respectfully urges this Honorable Committee not to pass this bill.

The HBWS appreciates the opportunity to provide testimony on this matter.

Sincerely,

WAYNE M. HASHIRO, P.E.  
Manager and Chief Engineer



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

January 29, 2009

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Rep. Robert N. Herkes                      Rep. Cynthia Thielen  
Rep. Chris Lee  
Committee on Water, Land, Energy and Environment  
The House, State Capitol  
Honolulu, Hawaii 96813

Dear Chair Ito and Members:

Subject:            **HOUSE BILL NO. 248, RELATING TO WATER**  
                         **HEARING: FRIDAY, JANUARY 30, 2009, 9:00 A.M., CONFERENCE ROOM 325**  
                         **STATE CAPITOL, 415 SOUTH BERETANIA STREET**

I am Milton D. Pavao, Manager of the Department of Water Supply of the County of Hawaii.

The Department of Water Supply is **not** in support of House Bill 248, which requires all potable water systems constructed after 7/1/10 to use polyvinyl chloride pipe.

Thank you for the opportunity to provide testimony. Should there be any questions, please call me at (808) 961-8050.

Sincerely,

✓ Milton D. Pavao, P.E.  
Manager

QA

*... Water, Our Most Precious Resource... Ka Wai A Kāne...*

The Department of Water Supply is an Equal Opportunity provider and employer.

# **BIA-HAWAII**

**BUILDING INDUSTRY ASSOCIATION**

January 30, 2009

Honorable Representative Ken Ito, Chair  
COMMITTEE ON WATER, LAND, AND OCEAN RESOURCES  
415 South Beretania Street  
State Capitol, Room 325  
Honolulu, Hawaii 96813

Dear Chair Ito,

Subject: House Bill No. 248, RELATING TO WATER, Requires all potable water systems constructed after July 1, 2020 to use polyvinyl chloride (PVC) pipe

I am Karen Nakamura, Chief Executive Officer of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii.

BIA-HAWAII is opposed to H.B.248 as it unnecessarily and unadvisedly restricts the use of other approved piping systems. There is no one type of pipe to transmit potable water. Pipe material is normally chosen by what is best for the terrain and application. Many factors including pressure, flows, backfill and loading will determine what material can and should be used for the particular application. Restricting other approved materials, both metal and plastic, that might be more economically installed, or would last longer in a particular application, would be a disservice to the taxpayers of Hawaii. Furthermore, if PVC were to be the only approved material, the cost would rise significantly.

We are opposed to H.B. No. 248 as drafted.

Thank you for the opportunity to share our views with you.



Executive Vice President/Chief Executive Officer  
BIA-Hawaii

Chair Ito and committee ON WATER, LAND, and OCEAN RESOURCES  
Room 325, Friday 1/29/09 at 9 a.m.

Subject: House Bill 248, RELATING TO WATER, requires all potable water systems constructed after July 1, 2010 to use polyvinyl chloride (PVC) pipe.

My name is F.M. Scotty Anderson and I have been involved in pipe sales in Hawaii for the past 30 years with wholesale companies such as Hawaii Pipe and Supply, Pacific Rim Pipe Supply, Familian Northwest and Ferguson Enterprise. Currently I have my own manufactures' representative agency and am still involved in pipeline projects.

If there was one type of pipe to do all, then that is how it would be, but that is simply not the case. Currently, in Hawaii, pipe for potable water service falls under the various counties Water System Standards. The choices vary to some degree from county to county.

In my career I have sold PVC, high density polyethylene (HDPE), ductile iron, steel, poly butylene (PB), and fiberglass (FRP) all in potable water applications. All of the materials have their pluses and minuses. Applications vary and therefore materials sometimes need to vary. Pipe designs need to take in many factors including terrain, profile (which greatly affects pressure ratings), soil conditions, loading, exposure, and whether or not it is a transmission or a distribution line. There are other factors; this was just to mention a few.

I am a major proponent of plastic pipe lines, but limiting potable lines to one material would be ill advised. For one thing PVC can't do it all, and the manufactures would immediately raise their prices as they would not have other materials to compete against.

If it was not for a conflict with the State Contractors License Board, of which I am Vice Chair, I would have appeared at this hearing in person. Should you have further questions of hearings I will make myself available.

Thank you for you consideration and this opportunity to share my views.

F.M. Scotty Anderson  
Pacific Rim Partners, LLC  
1405 N. King Street, Suite 302  
Honolulu, Hi 96817  
843-2500, cell 306-5697

# **ASCE** American Society of Civil Engineers

Hawaii Section

PO Box 917

Honolulu, HI 96808-0917

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January 29, 2009

Honorable Ken Ito, Chair

Honorable Sharon E. Har, Vice Chair

Honorable Members of the House Committee on Water, Land, & Ocean Resources,

**I am testifying in opposition to House Bill 248 Relating to Water, on behalf of the Hawaii Section of the American Society of Civil Engineers.**

The American Society of Civil Engineers was established in 1852 and is the oldest professional engineering organization in the United States. The Hawaii Section of ASCE was established in 1937 and is comprised of more than 1,000 civil engineers from both the public and private sectors of our state.

House Bill 248 would require that all public and private potable water systems permitted for construction after July 1, 2010, shall be constructed using polyvinyl chloride (PVC) pipe and fittings. This is an unreasonable and unnecessary restriction on the design and construction of water systems.

A potable water system runs from the water source through a myriad of pipes, reservoirs, pumps, and other equipment and fittings until it reaches the consumer in a home or other facility. While PVC has become widely used in water systems, it is limited only to certain parts of the transmission of potable water. Further, there are many cases where PVC is not the best material for construction. For instance, cast iron or concrete may be preferable for large capacity lines. To provide service to the consumer, the tapping of the service lines require the use of material capable of penetrating the wall of the line. In tight spaces, copper pipe is preferred for ease of installation. At the discharge point special materials are used for easier use and esthetic reasons.

For these reasons, the designer must be allowed the flexibility to choose the appropriate material based on best practices. Restricting the choice to a single material is not practical.

We recommend the tabling of House Bill 248. Thank you for your consideration.

Sincerely yours,



Owen Miyamoto  
Local Legislative Affairs Liaison





January 29, 2009

Representative Robert Ito, Chair  
Water, Land and Ocean Resources Committee  
Hearing: Friday, January 30, 2009 at 9:00 a.m.  
H.B. No. 248 - Relating to water.

Dear Representative Ito:

We oppose H. B. No. 248.

We have been involved in the potable water industry for over 30 years and have witnessed, and continue to witness, the various developments and improvements in drinking water quality, technology and materials over the years.

The health and welfare of the general public regarding safe drinking water has been in the hands of qualified water and health professionals since the late 1800's. The American Water Works Association (AWWA) established in 1891 today comprises over 50,000 drinking water professionals including potable water utilities, academia, researchers, scientists, regulators, engineers, manufacturers, suppliers, operators and others. AWWA is the authoritative source of safe water and provides the standards of reference for the drinking water industry.

Industry standards for potable water have been developed over the years to ensure the production and delivery of safe drinking water. Materials used today for conveying potable water have been tested and certified to be safe. The choice of materials to be used in the conveyance of potable water should be left to water professionals and not legislated.

H.B. 284 is presumptive and exclusionary. PVC (Polyvinyl Chloride) is not the only material approved and accepted by drinking water professionals. Ductile iron, HDPE (High Density Polyethylene) and copper also meet drinking water industry material standards. H.B. 284 wrongly assumes potable water professionals are incapable of determining the appropriate material of choice for potable water conveyance. The proposed bill is also shortsighted in that it precludes consideration of future development and improvements in potable water conveyance materials.

In closing, I strongly request that you not pass this bill out of your committee and leave such matters to the potable water professionals. Thank you.

Sincerely,  
ITC Water Management, Inc.

A handwritten signature in black ink, appearing to read "E. Gushiken", is written over a horizontal line.

Elson C. Gushiken  
Vice President



Hawaii Reserves, Inc.  
A LAND MANAGEMENT COMPANY

January 29, 2009

Via Facsimile (808) 586-8504

House Committee on Water, Land, & Ocean Resources

Rep. Ken Ito, Chair

Rep. Sharon E. Har, Vice Chair

**Re: H.B. 248 (Relating To Water)**

**Testimony In Opposition**

**Hearing: Friday, January 30, 2009, 9:00 a.m., Conf. Rm. 325**

**Copies Required: 13**

Honorable Chair Ito, Vice Chair Har and Committee Members:

Thank you for allowing me the opportunity to testify in opposition to House Bill 248 on behalf of Hawaii Reserves, Inc., a land management company and parent company for the Laie Water Company, which provides water to all of Laie.

First, Polyvinyl Chloride (PVC) is not the only plastic based pipe material. Although PVC pipe material is a good quality pipe material, it is not the only noncorrosive plastic based pipe material that has wide spread national and international use. Currently High-Density Poly Ethylene (HDPE) is being used in ever increasing amounts in many public and private drinking water systems throughout the United States and internationally as a noncorrosive drinking water pipe material. HDPE material has many superior properties compared to PVC:

- a. It is the preferred material for directional drilling and boring.
- b. It has more ductility compared to PVC pipe.
- c. It is seamless and has no gaskets that can get old and leak.

Second, materials decisions should typically be left to trained professionals. Given that there are other non-metallic and metallic pipe material choices available to be used in drinking water systems, the public's best interests are served by having the decision made by professionals responsible for these water systems; which are subject to numerous testing and oversight by state regulatory agencies. National professional water associations such as the American Water Works Association is dedicated to all aspects of the profession of producing and delivering safe drinking water to the people of America, and they do not support or recommend limiting the use of drinking water pipeline materials to PVC.

Third, this bill would limit the use of future materials as change occurs in the industry. It is better for industry professionals and government regulatory agencies to make the numerous technical material decisions as opposed to legislation.

For these reasons and others we respectfully request that you hold H.B. 248.

Kind regards,

Jeffrey Tsai  
Director Engineering & Utilities