

# TESTIMONY

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# HB2656, HD2

Measure Title: RELATING TO AIR POLLUTION CONTROL.  
Report Title: Air Pollution Control; Permit; Crematoriums  
Description: Requires all crematoriums operating without air pollution control permits and which were constructed prior to March 20, 1972, to submit permit applications to the Department of Health by December 31, 2015. (HB2656 HD2)  
Companion:  
Package: None  
Current Referral: HTH/ENE, WAM  
Introducer(s): SAY (Introduced by request of another party)

HTH/ENE  
Committee Hearing  
03-21-2012



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

In reply, please refer to:  
File:

COMMITTEE ON HEALTH  
COMMITTEE ON ENERGY AND ENVIRONMENT

H.B. 2656, H.D. 2, RELATING TO AIR POLLUTION CONTROL

Testimony of Loretta J. Fuddy, A.C.S.W., M.P.H.  
Director of Health

March 21, 2012  
3:30 p.m.

1 **Department's Position:** The Department of Health supports this bill to require all crematoriums to  
2 have air permits.

3 **Fiscal Implications:** The fiscal implications to the Department of Health should be minimal since this  
4 bill only affects three crematoriums. The bill will have a fiscal impact on the three affected crematoriums by  
5 way of permit fees and the implementation of any new permit requirements such as recordkeeping,  
6 reporting, and monitoring.

7 **Purpose and Justification:** This bill amends Chapter 342B, HRS to require all crematoriums to obtain  
8 air permits, including crematoriums built before March 20, 1972, that are currently exempt from the  
9 permit process. The permitting of all crematoriums will provide a more equitable regulatory playing  
10 field and allow the Department to have better regulatory oversight over the pre-1972 crematoriums.  
11 Requiring permits for the pre-1972 crematoriums will help ensure compliance with the air regulations  
12 through recordkeeping, monitoring, and reporting. Based on our records, there are three pre-1972  
13 crematoriums that would be affected by this bill.

14 We also recommend that the deadline for submitting an air permit application be changed from  
15 December 31, 2015 to December 31, 2013. A deadline of December 31, 2013 provides more than ample  
16 time for a facility to prepare and submit a permit application.

17 Thank you for the opportunity to testify on this bill.

*Promoting Lifelong Health & Wellness*

**HAWAIIAN MEMORIAL LIFE PLAN, Ltd.**

Db. Hawaiian Memorial Park Cemetery/Borthwick Mortuary  
1330 Maunakea Street • Honolulu, Hawaii 96817  
Phone (808) 522-5200 • Fax (808) 522-9310

March 19, 2012

Comments on HB2656

Honorable Chair Oshiro, Vice-Chair Lee and Members of the Committee

Regarding HB2656

Please accept my support of the intent of HB2656 to establish certain permitting requirements on crematory operations. I do believe these are good industry standards and should be complied with within a reasonable amount of time. The current language in the Bill requires crematories to be in compliance by December 31<sup>st</sup> 2012. This is an unreasonable time period. Crematories that are not currently in compliance will need more time to get their facilities updated. Many operations will need to go through construction permitting with a complete rebuilding of their crematories. Some materials will need to come from the mainland to complete this process which will delay updating facilities. This will create a financial burden on the crematories and will limit their ability to serve families. I would suggest an effective date of December 31<sup>st</sup> 2017. Please take into consideration the testimony of Oahu Cemetery and other funeral homes affected. They may need additional time.

Sincerely,

Jay Morford  
Vice President

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 10:38 AM  
**To:** HTHTestimony  
**Cc:** jerome.andrade@dignitymemorial.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Jerome Andrade  
Organization: Hawii Funeral & Cemetery Association  
E-mail: [jerome.andrade@dignitymemorial.com](mailto:jerome.andrade@dignitymemorial.com)  
Submitted on: 3/20/2012

### Comments:

Support HB2656 with extension to 2017 for completion to comply with the law. Thank You Jerome Andrade

*Leeward Funeral Home*  
*849 Fourth St.*  
*Pearl City, Hawaii 96782*  
*Tel. (808) 455-1041, Fax: (808) 456-3121*

THE SENATE  
THE TWENTY SIXTH LEGISLATURE  
REGULAR SESSION OF 2012

SENATE COMMITTEE ON HEALTH  
SENATOR JOSH GREEN M.D., CHAIR  
SENATE COMMITTEE ON THE ENVIRONMENT  
SENATOR MIKE GABBARD, CHAIR

HEARING RELATING TO AIR POLLUTION CONTROL

Testimony in opposition of HB 2656 HD2

Testimony by David Morikami  
V.P. LEEWARD FUNERAL HOME  
WEDNESDAY, March 21, 2012  
CONFERENCE ROOM 229

Chair Green, Chair Gabbard

I am testifying in opposition of HB 2656, HD2 in its present form. As the V.P. and Operations manager of Leeward Funeral Home, our funeral firm utilizes Oahu Crematory to perform our cremations. We feel that the adjusted deadline to complete the permitting process is still insufficient and ask that a minimum of 5 years be considered as a realistic compliance deadline.

The following factors and resulting impacts of a partial or complete shutdown imposed by the existing compliance deadline demonstrate why an extension is needed.

- Oahu Crematory performs approximately 2,000 cremations a year. The present permitted crematories on Oahu would not be able to handle the additional volume of cremations.
- The resulting number of decedents being held in preparation for cremation, would overly strain the refrigerated storage capacities of all agencies involved, particularly the

hospitals, some of which already have to deal with insufficient refrigerated storage capability. This would also affect the State's ability to respond in a mass casualty/mass fatality situation.

- The delays would also impact the family members of the decedents. Additional costs to the families (e.g. embalming, storage charges, etc.) awaiting cremation as well as the delays to Memorial Services, urn burials would also be impacted, ultimately resulting in the inability for loved ones to obtain closure after a reasonable time.

We agree with the general intent of HB 2656 HD2 and support the compliance requirements being sought by members of the surrounding community; however we feel that in all practicality, the stated deadline is still not realistic. A minimum of 5 years would be considered as a realistic compliance deadline to meet the current permitting process.

Thank you for the opportunity to testify.

TO THE SENATE COMMITTEE ON HEALTH

TWENTY-SIXTH STATE LEGISLATURE  
REGULAR SESSION, 2012

HEARING RELATING TO AIR POLLUTION CONTROL  
HB 2656 HD 2

Testimony by Clifford Hosoi  
President Hosoi Garden Mortuary, Inc.  
Wednesday, March 21, 2012 3:30 p.m.  
Conference Room 229

TESTIMONY AGAINST HB 2656, HD 2

Senator Josh Green, M.D., Chair  
Senator Clarence K. Nishihara, Vice Chair

Dear Chair Dr. Green, Vice Chair Nishihara and Committee Members:

On behalf of Hosoi Garden Mortuary, Inc. we thank you for the opportunity to comment on this bill before the Committee.

I am concerned of the impact and ramifications of HB 2656. While I am in agreement with the intent to require oversight by the Department of Health to insure air quality in all crematory operations, I am opposed to this bill due to the limited time to affect the required changes by December 31, 2015. We will be at a severe loss if Oahu Crematory, as one of the grandfathered operations would not be able to provide continuing services to vendors such as us while attempting to reconstruct their crematory facilities. Our clients who depend on us to provide timely cremation services may not be able to request timely funeral and memorial services and could experience a reduction in response time if Oahu Crematory is unable to comply and operate. If Oahu Crematory is shut down for any length of time it is uncertain if the other crematory operators can efficiently absorb the increased case load.

Oahu Crematory has been our long standing provider of cremation services for over 35 years during my tenure and over 35 years before that with my father. In the event that the Crematory would need to discontinue services to comply with current permitting standards, we would be placed in hardship to find another vendor to provide the level of services needed. Cremation, memorial services, and scattering has come to be accepted as a dignified and chosen disposition. For our mortuary, cremation is chosen by over a 1,000 families annually. For some it is considered to be the better ecological choice over traditional body burial. In addition, Oahu Crematory and Cemetery has provided an important choice for families:

1. Centrally located as part of the cemetery grounds, it is conveniently located and can be easily accessible which controls transport costs.
2. When requested, provide special services like providing peace of mind to families by offering witness cremations where families can gather and participate in the placement of the casket in the cremator.
3. The crematory operations enhances the successful running of the cemetery for all plot holders and families who have members interred there keeping the cemetery beautiful, well maintained, and sufficiently funded.
4. Oahu Crematory has been able to keep their services affordable to all families.
5. Oahu Crematory has maintained turnaround times to accomplish a cremation resulting in family scheduling services or departures fitting their bereavement schedules.
6. Oahu Crematory has three operating cremators and the funeral industry has depended on them for reliability and use when other vendors need to repair their cremators. The existing crematory operators are sized to handle their own cremation needs and if Oahu is not available would be unable to handle the cases of its primary vendors: Hosoi Mortuary, Ultimate Cremations, Leeward Funeral Home, and the University Medical School.

Oahu Crematory provides a needed function in the cremation needs of the community and we would be severely impacted if the crematory would be needing to shut down or curtail its activities. At current levels we are unsure if the other cremation vendors would have proper capacity to absorb Oahu Crematory's role that would result in delays and cost increases for the community.

I believe Oahu Crematory has been well run and has instituted procedures to become a better neighbor. Training manuals and record keeping has been modeled after standards of the Cremation Association of North America. Procedures are in place to minimize improper emissions. They have implemented many restrictions to improve air emissions. They have brought in natural gas to reduce the use of diesel oil. They have strictly adhered to prohibited non-crematable items that would jeopardize air quality. Their cremators are old but are properly maintained and outperform modern cremators but without electronic sensors and meters, reliance is on the skill of the operator to provide for clean combustion. Invariably there is some discharge but procedures call it to be eliminated as a sign of improper combustion. Even in the most modern equipment some discharge occurs until the sensors can react to the events in the combustion chamber. Hal Lewis, the superintendent at Oahu Crematory, have informed me that they have not been cited by the Board of Health when they have witnessed and observed the process and the resultant emissions. An open invitation can be extended to any Senator to witness the process for themselves and see how well the process is conducted.

I believe a proper design, retrofit, and replacement plan can be implemented for the benefit of all. To work it must be given enough time for the best solution to arise. That solution needs to take into account the need for Oahu Crematory to remain in operation and the vendors and the subsequent families whom they serve who rely on Oahu Crematory's abilities. If a complete makeover is the only solution then sufficient time



must be given for the design, decisions, financing, permitting and construction to take place. Three years to complete may not be realistic. May I submit that a time frame of 5 to 7 years is needed for a concurrent operation/construction to take place. This advancement could then be monitored by the Board of Health.

I ask that you consider the importance of Oahu Crematory's operations to the funeral industry along with the needs of the residences.

Thank you,

Clifford Hosoi, President  
Hosoi Garden Mortuary, Inc.



# Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803  
808.538.6616 hawaii.chapter@sierraclub.org

## SENATE COMMITTEE ON HEALTH COMMITTEE ON ENERGY AND ENVIRONMENT

March 21, 2012, 3:30 P.M.  
(*Testimony is 1 page long*)

### TESTIMONY IN SUPPORT TO HB 2656 (HD2) WITH PROPOSED AMENDMENTS

Aloha Chair Green, Chair Gabbard, and Members of the Committee:

The Sierra Club of Hawai'i supports House Bill HB 2656 (HD2), which brings out-of-date crematoriums in compliance with modern air regulations and best available technology. We suggest, however, that clean air permits be required no later than December 31, 2013 (approximately 2 years from the date of the original introduction of this bill).

The Sierra Club received several complaints about crematoriums that bellow particulates into the air. This measure would address those concerns by requiring those crematoriums to obtain a clean air permit, follow best practices, and be obliged to self-report any violations of permit conditions. This is the law for most modern crematoriums and, thus, would ensure fairness in the marketplace and reduce pollution in our community.

The people of Hawai'i deserve a clean environment.

Mahalo for the opportunity to testify.

Mahalo nui loa,  
Robert D. Harris, Esq.  
Director  
Sierra Club, Hawai'i Chapter  
P.O. Box 2577  
Honolulu, HI 96803  
808.538.6616 (office)  
[www.sierraclubhawaii.com](http://www.sierraclubhawaii.com)

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## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Saturday, March 17, 2012 9:45 PM  
**To:** HTHTestimony  
**Cc:** leeb@seattleu.edu  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Brittany Lee  
Organization: Individual  
E-mail: [leeb@seattleu.edu](mailto:leeb@seattleu.edu)  
Submitted on: 3/17/2012

### Comments:

I support this bill, as I have been living next to a crematorium for my entire life so far. My neighborhood is my home, and I wish to continue living here in good health. Being forced to move for cleaner air would be a tragedy. I stand for all who are affected by poorly controlled cremation byproducts.

Aloha to our elected representatives,

My name is Harlan Kanoa N Sheppard. I live at 320 N Judd St, which happens to be immediately makai of Oahu Cemetary's smokestack. Our family has long experienced discomfort on the days that the crematorium is operating. While we mean goodwill towards our neighbors who represent the institution, I do support legislative intervention to ensure cleaner air for all of us in the area.

Sincerely,

Harlan Kanoa N Sheppard  
320 N JUDD ST

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 9:50 AM  
**To:** HTHTestimony  
**Cc:** stnlshr250@gmail.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: Yes  
Submitted by: Stanley Shiraki  
Organization: Individual  
E-mail: [stnlshr250@gmail.com](mailto:stnlshr250@gmail.com)  
Submitted on: 3/18/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 2:20 PM  
**To:** HTHTestimony  
**Cc:** tasker@pixi.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Tasker Tanaka  
Organization: Individual  
E-mail: [tasker@pixi.com](mailto:tasker@pixi.com)  
Submitted on: 3/18/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 3:02 PM  
**To:** HTHTestimony  
**Cc:** isokanes002@hawaii.rr.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: No  
Submitted by: **gladys isokane**  
Organization: Individual  
E-mail: [isokanes002@hawaii.rr.com](mailto:isokanes002@hawaii.rr.com)  
Submitted on: 3/18/2012

### Comments:

I sincerely think that Oahu crematory should close as the air is so bad that it cause headache, nausea, cough, burning eyes and vertigo. The air is polluted with heavy dose of radiation and other medications when cancer patients who expired.



## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 3:36 PM  
**To:** HTHTestimony  
**Cc:** hafakasi07@aol.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Blaize Soakai  
Organization: Individual  
E-mail: [hafakasi07@aol.com](mailto:hafakasi07@aol.com)  
Submitted on: 3/18/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 7:37 PM  
**To:** HTHTestimony  
**Cc:** sandbagger56@yahoo.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229

Testifier position: **Oppose**

Testifier will be present: No

Submitted by: **Vincent Sugii**

Organization: Individual

E-mail: [sandbagger56@yahoo.com](mailto:sandbagger56@yahoo.com)

Submitted on: 3/18/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 7:43 PM  
**To:** HTHTestimony  
**Cc:** leeplace1@yahoo.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: Yes  
Submitted by: **Karen Lee**  
Organization: Individual  
E-mail: leeplace1@yahoo.com  
Submitted on: 3/18/2012

### Comments:

I am advocating on behalf of my family, the neighborhood, and especially the children and elderly who may not be able to represent themselves. HB2656 requires all crematoriums operating within the State to be subject to the air pollution control permitting requirements. Currently, crematoriums constructed prior to March 1972 are exempt from the air pollution control permit requirements.

My husband and I have experienced the fallout of pollution from an unpermitted crematorium in our neighborhood for over 20 years although our first complaint to the Department of Health (DOH) was made 14 years ago (1998). We have undergone numerous bouts of strong fumes and odors. We're at the point that my husband is having respiratory problems and difficulty breathing when emissions permeate our home. Calls have been made to the DOH for their assistance in abating the problem, but we have been told on many occasions that they have their "hands tied" or are "unable to do anything" because the crematorium is grandfathered and does not require a permit. Requiring a permit for crematoriums to operate is not a novel idea in the state of Hawaii as all other crematoriums built after 1972 are required to have an air permit. In fact, our neighborhood crematorium is the only crematorium operating without a permit on Oahu. There is only one other crematorium operating without a permit, and it is located on the Big Island. The crematorium in our area is unique in that it is situated in the thick of a densely populated residential mixed-use neighborhood and handles 50 percent of all the cremations on Oahu. I have seen thick smoke engulf Waolani Judd School, where the children, who are more vulnerable to pollutants, are exposed...and they have been exposed on a regular basis.

Are crematorium emissions safe? Crematoriums without filters release harmful emissions such as nitrogen oxides, carbon monoxide, hydrogen chloride, sulphur dioxide, dioxins, furans, formaldehyde, mercury, other heavy metals such as cadmium and lead, as well as tiny portions of dust called particulates. The safe levels of chronic exposure to heavy metals such as lead and mercury do not seem to have been established. The Centers for Disease Control (CDC), which sets the national policy regarding childhood lead levels challenged the long-held notion that there is a threshold below which lead is not toxic. The committee's report asserts that there is no safe lead level for children -- that many of the consequences of early lead exposure are irreversible. The adverse effects extend beyond the neurodevelopmental realm into cardiovascular, immunological, and endocrine effects. In addition, according to Dr. Lars

Friberg, Former Chief Adviser to the World Health Organization on Mercury safety, "There is no safe level of mercury, and no one has actually shown that there is a safe level. No amount of exposure to mercury vapor can be considered harmless. " Mercury affects the body in multiple ways, the most significant being the fact that it disrupts the natural processes that the body must complete in order to detoxify – creating a vicious cycle where more and more toxins are trapped in the body. Mercury is particularly difficult to remove from the body and will tend to attach itself to the cells instead of leaving the body. Mercury often attaches to the brain. That is why the symptoms of Mercury poisoning resemble so closely neurological disorders such as Alzheimer's, Dementia, and many auto-immune disorders. Mercury vapors can remain for months or years on furniture, carpet, floors and walls. To put the danger of mercury in perspective, it takes just 1 gram of mercury in a lake of 27 surface acres to trigger elevated toxic levels in fish, according to the U.S. Geological Survey. Mercury emissions from cremations in the US are estimated to be about 3 tons per year. Mercury is particularly dangerous to fetuses and children. Exposure can lead to irreversible neurological damage which results in memory loss, attention deficit and other learning disabilities, according to the EPA. The EPA has also reported that there appears to be no "safe" level for dioxin exposure. Dioxins are formed when products such as plastic are burned. These plastics may be present as prosthetics, body bags, or as part of the container. Dioxins' half-life in the body is estimated to be seven to eleven years. Dioxins may affect the immune system and cause damage to the liver, kidney and digestive tract. Cancer, miscarriage, and birth defects are also possible at higher than average concentrations.

Our neighborhood crematorium established itself in 1906 and has 3 incinerators ranging from 79 to 106 years old. The incinerators do not have any type of filter system to address the problem with its toxic emissions. Nor do their incinerators have monitoring systems as do the more current incinerators. In fact, our crematorium is still using diesel fuel for their primary burners. All the other crematoriums on Oahu utilize clean fuel such as natural gas or propane for their primary and secondary burners. Diesel exhaust contains more than 40 toxic air contaminants and is a major source of fine-particle pollution. Diesel exhaust includes many known or suspected cancer-causing substances, such as benzene, arsenic, formaldehyde and nickel. It also contains other harmful pollutants, including nitrogen oxides (a component of urban smog). There have been numerous instances when my family could smell the burning fuel. Exposure to diesel exhaust occurs whenever a person breathes air that contains these substances. The toxic gases and small particles of diesel exhaust (particulate matter) are drawn deep into the lungs, where they can contribute to a range of health problems. Diesel exhaust is a major source of fine-particle pollution and the elderly and children are especially susceptible to the effects of these fine particles. Long term exposure to diesel exhaust poses the highest cancer risk of any toxic air contaminant. According to the EPA, immediate effects of exposure can create inflammation in the lungs that may cause chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. Other immediate effects are listed as irritation of eyes, nose, throat, coughing, headaches, light-headedness and nausea. It should be noted that several residents who signed the petition for HB2656 expressed respiratory difficulties and headaches.

The DOH claims that they have conducted some on site inspections of our neighborhood crematorium. However, they reported that it is difficult for them to conduct continuous monitoring of the opacity of emissions themselves. That is, they would have to visually witness a violation of opacity of the emissions since the crematorium does not have a schedule of cremations or opacity monitoring system. With a permit, the DOH may

require crematoriums to install a continuous monitoring system.

With the passage of HB2656, The DOH will be able to better monitor the emissions of all crematoriums and set limitations and standards to have adequate control over air pollutants. According to the EPA, individual States generally require that crematories hold permits, meet specified design requirements to limit emissions, and conform to certain operating requirements. It is up to each State to enforce air permit regulation. In reviewing a permit of one of the crematoriums in our State, similar requirements could be made of all crematoriums such as:

- a) Only human remains and the casket or cloth containing the remains are allowed to be processed in the crematory units. Fiberglass or plastic caskets are not allowed. This could significantly reduce or eliminate the smoke and toxins emitted from burning coffins and plastic body bags.
- b) The crematory unit burners shall be fired only on synthetic natural gas.
- c) The permittee is not authorized to burn medical or hazardous wastes. The DOH may at any time require a higher set point temperature for the secondary chamber if an inspection indicates poor or insufficient control.
- d) The DOH may require the permittee to install and operate a continuous emission monitor or to conduct source performance tests or ambient air quality monitoring.
- e) The DOH reserves the right to impose additional operational controls and/or restrictions if a site evaluation indicates that additional controls and/or restrictions are necessary.
- f) The permittee shall follow a regular maintenance schedule to ensure proper operation of the crematory units.
- g) The amount of particulate matter is limited.

Other limitations to be considered in a permit for crematoriums are as follows:

Crematoriums, especially those in residential and heavily populated areas, could be required to utilize equipment with built in filters and alarm monitoring systems. Or crematoriums may opt to use a safe alternative methods that just utilize water and potassium hydroxide.

Crematoriums may be required to have dental fillings removed from bodies prior to cremation or may present that option to families.

The amount of smoke could be limited. In the case of the permitted crematoriums, they shall not exhibit visible emissions of 20 percent opacity or greater for any six minute average

period. (Currently, a non-permitted crematorium is allowed visible emissions of 40 percent opacity under HAR 11-6-.1-32). A crematorium that is in the

thick of a residential district should have more stringent, rather than less stringent standards for opacity. New York City permits emissions of only 10 percent opacity.

With a permit, monitoring and record keeping requirements are also stated. Based on a permitted crematorium, the following requirements serve as an example of how the permit can be utilized:

The opacity alarm monitoring system shall be maintained and kept in operational condition at all times. Also, the permittee shall maintain records for each cremation such as type of casket, weight of

remains, material enclosing the remains temperature of the secondary chamber, cremation time, date and time when monitor warning indicator triggered and corrective action taken, etc.

With the requirement of a permit for crematoriums, the DOH will be able to better monitor emissions of and set limitations and standards to have adequate control over air pollutants. This will benefit not only neighborhoods in close proximity to crematoriums, but the state as a whole as pollutants can infiltrate our air, ground, and water. The passing of HB2656, requiring all crematoriums to apply for a permit, is a step in the right direction.

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, March 18, 2012 9:23 PM  
**To:** HTHTestimony  
**Cc:** wakae@hawaii.rr.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: **No**  
Submitted by: **Eric Wakabayashi**  
Organization: Individual  
E-mail: [wakae@hawaii.rr.com](mailto:wakae@hawaii.rr.com)  
Submitted on: 3/18/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 19, 2012 10:41 AM  
**To:** HTHTestimony  
**Cc:** gma917@hawaiiantel.net  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Barbara Nakamatsu  
Organization: Individual  
E-mail: [gma917@hawaiiantel.net](mailto:gma917@hawaiiantel.net)  
Submitted on: 3/19/2012

Comments:



## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 19, 2012 9:00 PM  
**To:** HTHTestimony  
**Cc:** akio\_zane@hotmail.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Ryan Zane  
Organization: Individual  
E-mail: [akio\\_zane@hotmail.com](mailto:akio_zane@hotmail.com)  
Submitted on: 3/19/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 19, 2012 9:05 PM  
**To:** HTHTestimony  
**Cc:** karmimoto@yahoo.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: No  
Submitted by: **Karen Marumoto**  
Organization: Individual  
E-mail: [karmimoto@yahoo.com](mailto:karmimoto@yahoo.com)  
Submitted on: 3/19/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 19, 2012 9:10 PM  
**To:** HTHTestimony  
**Cc:** cmlee@hawaii.edu  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: No  
Submitted by: **Colleen Lee**  
Organization: Individual  
E-mail: [cmlee@hawaii.edu](mailto:cmlee@hawaii.edu)  
Submitted on: 3/19/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 19, 2012 9:29 PM  
**To:** HTHTestimony  
**Cc:** cmlee@hawaii.edu  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: No  
Submitted by: **Chandelle Lee**  
Organization: Individual  
E-mail: [cmlee@hawaii.edu](mailto:cmlee@hawaii.edu)  
Submitted on: 3/19/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 19, 2012 9:33 PM  
**To:** HTHTestimony  
**Cc:** kai\_kane808@yahoo.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Kila Sumalpong  
Organization: Individual  
E-mail: [kai\\_kane808@yahoo.com](mailto:kai_kane808@yahoo.com)  
Submitted on: 3/19/2012

### Comments:

I live in this neighborhood and do not appreciate being constantly bombarded with these smelly fumes from the crematorium.

Please have them stop this.

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 12:37 AM  
**To:** HTHTestimony  
**Cc:** fnokazaki@aol.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229

Testifier position: **Support**

Testifier will be present: No

Submitted by: **Jeffrey H. Okazaki**

Organization: Individual

E-mail: [fnokazaki@aol.com](mailto:fnokazaki@aol.com)

Submitted on: 3/20/2012

### Comments:

My name is Jeffrey H. Okazaki. My residence is at Lee Place(off Judd Street), approximately 1,000 feet from the Oahu cemetery crematorium. I fully endorse HB2656 and would like to make one recommendation to eliminate the word "human" (there is a pet crematorium as well) from the proposed bill:

§342B- Crematoriums. (a) All crematoriums of human remains operating within the State shall be subject to the permit requirements of this chapter; provided that owners or operators of crematoriums constructed before March 20, 1972, and operating within the State without a permit shall submit permit applications to the department no later than December 31, 2015.

(b) The department may adopt rules to impose permit conditions to minimize ambient air quality impacts caused by crematoriums.

To support HB 2656, I submit the following:

I have lived at Lee Place (with the exception of serving in the military for 5 years) for 55 years and have been subjected to the air pollution emitted from Oahu cemetery's crematorium throughout this period.

While we are unable to prove the air pollution emission from the crematorium is the direct cause of any health problems within the family, we can point to some of the effects of this pollution from Oahu Cemetery's crematorium.

1. We have had to regularly clean our homes at least weekly from what appears to be soot settling within our homes on the drapes, sheets, pillows, floor, etc.

. We need more frequent corrosion control maintenance and repair on the screens, window frames, railings, fences, etc made of aluminum than most other places. For example, since our latest home was built in 1978, we have had to redo or repair our aluminum fixtures due to corrosion, etc. every 10-15 years as compared to the 20-25 years experienced by those living in most other areas of Oahu.

3. Choking, coughing, wheezing, etc. My daughter and grandchildren have problems breathing when the Oahu cemetery crematorium is operating. These instances of breathing problems occur during the day as well as during the evening or early morning directly correlated with the crematoriums operation.

4. Fruits and Vegetable Gardening. Fruits and vegetables being grown in the yard have to be washed as they have "powdery" dust on them.

5. Tropical plants, orchids, etc. They, too, need to be cleaned as they have the "powdery" dust on the leaves.

6. While others in the neighborhood do so, we do not air dry our laundry due to the "soot" problem.

Thank you for listening to our needs and acting on them. Sincerely, Jeff Okazaki

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 10:46 AM  
**To:** HTHTestimony  
**Cc:** mendezj@hawaii.edu  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: Yes  
Submitted by: Javier Mendez-Alvarez  
Organization: Individual  
E-mail: [mendezj@hawaii.edu](mailto:mendezj@hawaii.edu)  
Submitted on: 3/20/2012

Comments:



## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 11:12 AM  
**To:** HTHTestimony  
**Cc:** dane.c.lee@gmail.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM **HB2656**

Conference room: 229  
Testifier position: **Support**  
Testifier will be present: No  
Submitted by: **Dane Lee**  
Organization: Individual  
E-mail: [dane.c.lee@gmail.com](mailto:dane.c.lee@gmail.com)  
Submitted on: 3/20/2012

### Comments:

While I was attending college at University of Southern California, I had a discussion with Phd Constantinos Sioutas about the air pollution from this crematorium. He stated that when something is burning, it is unacceptable see smoke or smell it. He further emphasized that it is really bad when at the same time you can see it and smell it.

Professor Sioutas has research interests in air pollution, aerosol technology, particle sampling, and pollution control. Findings from his work have been extensively used in legislation, including the revision of US EPA National Air Quality Standards (NAAQS) on particulate matter (PM) and also by the state of California.

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 1:54 PM  
**To:** HTHTestimony  
**Cc:** leeplace1@yahoo.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: Yes  
Submitted by: Edmund Lee  
Organization: Individual  
E-mail: leeplace1@yahoo.com  
Submitted on: 3/20/2012

### Comments:

I am in support of HB2656 to require pre-1972 non-permitted crematories to acquire an Air Permit.

For the protection of public health and air quality, Hawaii Revised Statute (HRS) 342B Air Pollution Control, requires that all air pollution sources are required to have an Air Permit, with the exception that existing air pollution sources in existence prior to March 1972 are exempt from this rule.

The intent of HRS342B is for the protection of public health and air quality, and it provides the Department of Health authority to monitor and control air pollution via the permit system. After this month, 40 years will have passed from March 1972 exemption date. Over that time, the industry profile had evolved, and this exemption now allows un-permitted crematories to operate counter to the intent of HRS342B.

We find that this exemption, with regards to human crematoriums, is now causing harm to public health and degradation of air quality within its local area. This exemption for human crematoriums is considered obsolete, allows for divergence from the intent of HRS342B, has an environmental backlash that does more harm than good, and should be amended. The demographic profile of this industry indicates that the demand for cremations will significantly increase and will result in higher frequency of emissions. Therefore all crematories should now have an Air Permit. Emissions from crematories are toxic, and due to limited land availability, they are located within close proximity to residents and the public. Un-permitted crematoriums have greater leeway to discharge higher intensity of emissions and higher amounts of toxins.

Please view the youtube video of an unpermitted crematorium. Lack of air pollution controls have allowed this unpermitted crematorium the ability to diverge from the intent of HRS342B. Also, in this video you will see at the 7 minute mark a fire truck responding to this situation. Honolulu Fire Department had responded on other similar occasions in the past. Link:

<http://www.youtube.com/watch?v=oQqKmN-CCAU>

Air pollution sources that were in operation prior to March 1972 were exempt from obtaining an air permit (a.k.a. "grandfather clause"). This grandfather clause was a courtesy to alleviate owners from

hardship due to an unforeseen ruling. It would allow the business to fairly recover start-up costs, allow the machines to use up its life expectancy, and set aside cash reserves to transition to newer clean technology.

Nearly 40 years has passed from this exemption date, and such an operation has more than recovered their costs and good profits have been made. Reserves should have been set aside. In return for the above the courtesy, such an operation should exercise social responsibility and use the new clean technology that is available. This courtesy of the grandfather clause was not meant for an old and obsolete system to be ramped-up for more good profits. Old cremation units do not have manufacturer's data/specifications or any manufacturer technical support.

State Department of Health stated that they support HB2656. Their research reveals that our state has only 3 crematoriums that do not have an air permit. The first is on Maui, however this business is closing down. The second crematorium is located on Hilo, and the third is on Oahu. The unpermitted crematorium on Oahu has a 50% market share of cremations. This means that half of all cremations done on Oahu are done in a manner that releases much more pollutants than the crematoriums which have an air permit.

An air permit will ensure that a crematorium's incinerator is used correctly to preserve the local air quality. The permit will have a detailed analysis of all equipment used and emissions being discharged. It will provide a baseline of information to ensure that this air pollution source will operate within the regulated parameters of air emission laws.

Incineration is a method of decomposing a product into particulate matter and gases, then dispersing these products into the air. Not all products of combustion will continually rise and dissipate itself into the upper atmosphere. All products of combustion that are heavier than air will eventually dissipate back to ground level. The particulate matter, heavy metals, and fumes will be inhaled or ingested, and creates a sanitary/environmental problem. These emission products present health, environmental, and sanitary concern. I would like to clarify that sanitary concerns includes the dispersion of human particulate matter when incomplete combustion occurs.

Reason 1: DOH has no operational data for a source that has no permit

- Other than information gained from investigations after an official complaint, there is no data of value as compared to a stationary source that has an air permit.
- Nothing is available from an unpermitted air pollution source. They are not required to provide any information, and thus may be out of compliance with air regulations.
- 40 years has passed, we need to be start being progressive and not status quo.

Reason 2: Permit establishes an approved baseline for equipment used.

- A permitted air pollution source must disclose equipment specifications, maximum design capacity, fuel type, fuel usage, production capacity, production rates, manufacturer's literature.
- A permitted source must identify and describe in detail all air pollution control equipment and compliance monitoring devices.
- Unpermitted sources are not required to disclose any of the above information. Their equipment may be so outdated that no manufacturer's data is available. This is a loophole that allows the operator to continually modify and make changes to their equipment, which can thereby effect unauthorized changes to emission outputs.

### Reason 3: Emission Data and Data Base

Permit holder provides emission data that identifies their air pollutants and the emission rate of those pollutants. We currently do not know what emissions and emission rates being discharged from an unpermitted source.

- Emission data will help determine if a source is in compliance with current air standards before having approval to operate.
- Emission data provides a data base. For good reason, permit holders cannot modify their equipment or incineration process if a new air pollutant will be created, or there will be an increased quantity of an air pollutant. Since there is no data base from an unpermitted source, this source is fairly free to do modifications or process changes that could result in a greater negative impact.
- Emission data base (inventory of emissions) is extremely important. Equipment and operating systems of an air pollution source can deteriorate from years of usage. This original data can be used to determine if the air pollution source is still in compliance with air standards.
- Air standards set by the EPA or State can change and become more stringent. Emission data base will help determine how these regulatory changes will affect the air pollution source.

### Reason 4: Compliance Plan

- Permit holder is required to have a plan to show how they will be in compliance to all applicable requirements. Compliance plan will ensure a consistent operation of the source for meeting air standards.
- Periodic reporting requirements on emissions ensure continuous compliance.  
There are no periodic reporting requirements for a source that does not have a permit, and no approved monitoring system to ensure continuous compliance.

### Reason 5: Special Conditions can be applied

- Permit allows for special conditions to be added to a permit to ensure that incineration will be in compliance and for public health. An example of a special condition is a rule stating that plastics cannot be burned with a cremation.
- Temperature requirements for the burners can be stated.
- Types of automated monitoring systems to be installed.
- In this section the stricter opacity ruling of 20% opacity can be applied as a requirement.

Note that other states are down to 10%

- Require odor restrictions
- Require start-up restrictions to prevent excessively high release of toxic emissions
- Allow only low chlorinated (such as 5%) plastic body bags to be burned to limit emission of dioxins and furans.
- Establish reasonable hours for burning

### Reason 6: Permit has Content

Permit may incorporate the following:

- Establish emission limitations and standards
- Permit term of 5 years and renewable
- Requirements for installation of devices for measurement and analysis of emissions
- Requirement for source emission test to determine compliance
- Monitoring and recordkeeping requirements

- Other records such as strip chart recordings, calibration and maintenance records
- Requirement for retention of records
- Provision for annual reporting of hazardous air pollutants

Reason 7: Permit can supplement enforcement for compliance

- Examples of conditions imposed on a permitted source when not in compliance
1. "The Department of Health reserves the right to impose additional operational controls and/or restrictions if a site evaluation indicates that additional controls and/or restrictions are necessary."
  2. "Although not required at this time, the Department of Health may at any time require the permittee to install and operate a continuous emission monitor or to conduct source performance test or ambient air quality monitoring."
- The above examples were obtained from an actual permit issued.
  - An unpermitted source will not have such supplemental enforcement conditions. (You will be lucky to even get a verbal promise from them.)

Reason 8: Opacity Restrictions

- Residents and users of an area that are within the range of the exhaust plume are impacted by incinerator emissions. Current allowable opacity for a non-permitted pre March 1972 crematory is up to 40%. All current post March 1972 crematories have an opacity limitation of up to 20%. A reduction to 20% opacity limitations will reduce the amount of particulate matter and fumes being emitted. A reduction of opacity leads to a healthier and cleaner environment.
  - A darker opacity means that the incineration process is not fully efficient. Smokes are products of combustion which are not being completely burned by heat and fire.
- Residents in permitted areas are exposed to lower opacity and cleaner air, why should others in un-permitted areas not be given the same right to cleaner air and sanitation.

Reason 9: Trend is for increased demand for cremations

Land is scarce and costs of burials are high. There is a larger population of aging adults as compared to the past. The demographics of an aging population, scarcity of land, burial costs will all subsequently create an increase in demand for cremations.

Increased demand means increased operational time which creates more emissions. How can we allow an unpermitted source, for which we do not have any operational and emission data, to continue with increasing outflow of emissions. An air permit should be required to ensure that a source meets air emission standards, and especially when it is a source that does 50% of cremations.

Thank you,

Edmund Lee

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 2:00 PM  
**To:** HTHTestimony  
**Cc:** cml@hawaii.edu  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: No  
Submitted by: Chelsea Lee  
Organization: Individual  
E-mail: [cml@hawaii.edu](mailto:cml@hawaii.edu)  
Submitted on: 3/20/2012

Comments:

## Green4 - Mailene

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, March 20, 2012 3:29 PM  
**To:** HTHTestimony  
**Cc:** leed065@hotmail.com  
**Subject:** Testimony for HB2656 on 3/21/2012 3:30:00 PM

Testimony for HTH/ENE 3/21/2012 3:30:00 PM HB2656

Conference room: 229  
Testifier position: Support  
Testifier will be present: Yes  
Submitted by: Dennis Lee  
Organization: Individual  
E-mail: [leed065@hotmail.com](mailto:leed065@hotmail.com)  
Submitted on: 3/20/2012

### Comments:

I am a person with a disability and strongly support this bill. I would also like to represent others who have disabilities.

I have Parkinson's Disease, which is a disorder of the central nervous system caused by degeneration of neurons in the brain resulting in muscular rigidity, tremors, slow, movement, poor balance.

Movement affected includes range of motion, mobility, dexterity,, coordination of all physical day-to-day routine activities rendering me to a state of nonfunctionality (known as "off" time).

It is difficult for me to open and close the doors and windows of my home when we become exposed to the smoke and gases from the crematorium. My home becomes filled with these fumes and I have to continually re-breathe it until it finally clears from the inside of my house.

It is difficult to find an escape from these fumes when you have a physical disability.

Also when my wife is home, she becomes very concerned because it smells as though something is burning in the house. She always has to inspect the entire house to determine if we have a fire within our home.