

STATE OF HAWAII  
DEPARTMENT OF DEFENSE

TESTIMONY ON HOUSE BILL 2076  
A BILL FOR AN ACT RELATING TO DEPLETED URANIUM

PRESENTATION TO THE  
HOUSE COMMITTEE ON FINANCE

BY

MAJOR GENERAL ROBERT G. F. LEE  
ADJUTANT GENERAL  
February 25, 2008

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

I am Major General Robert G. F. Lee, State Adjutant General. I am testifying on House Bill 2076. This bill requires the Department of Health to establish air sampling stations to monitor levels of depleted uranium.

We support the intent of House Bill 2076 so long as it does not replace or adversely impact priorities as indicated in the Executive Supplemental Budget Request.

The United States Army has not shipped, stored, or used any ammunition in Hawaii that contained depleted uranium since 1962. It should be noted that spotting rounds with depleted uranium has been limited to the range impact areas only and not on the maneuver training areas that are used by our soldiers.

Since the discovery of depleted uranium, the U. S. Army has started and continues to monitor and remediate their training areas and weapon ranges. They have been very open in the discussions regarding depleted uranium at the ranges and are working with the State Department of Health, other federal organizations, and have kept our communities informed through town hall and formal meetings.

Additionally, the Department of Health conducted periodic background readings, usually on a monthly basis, in the populated areas around Pohakuloa Training Area, and the readings have been normal.

Chair Oshiro, thank you for the opportunity to provide this written testimony.



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

In reply, please refer to:  
File:

**House Committee on Finance**

**HB 2076 RELATING TO DEPLETED URANIUM**

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

**February 25, 2008**

**2:45 p.m.**

1 **Department's Position:** The department supports the intent of the bill but has strong reservations.

2 **Fiscal Implications:** The proposed activities are not budgeted. Cost estimate for implementation is  
3 \$1.64 million (See Addendum).

4 **Purpose and Justification:** The bill requires the department of health to collect data on levels of  
5 contamination by depleted uranium by establishing air sampling stations located adjacent to and  
6 downwind from military facilities in Hawaii where depleted uranium was used.

7 The department supports the continuous air monitoring and routine analysis of samples to  
8 identify and quantify any depleted uranium released from military facilities and traveling into adjacent  
9 communities. We are happy to consult with qualified experts. We do not see a need to adopt the  
10 proposed rules; the department can address the issues of access, standards, and chain of custody with its  
11 existing authorities. However, aside from limited air sampling conducted under EPA, there are no funds  
12 in the department to implement these activities. Any appropriations should not adversely affect the  
priorities in the executive supplemental budget priorities.

14 Thank you for the opportunity to testify.

Addendum to  
Department of Health  
Testimony  
on HB2076

BUDGET:

Assume Three Army Posts Requiring Air Monitoring; Five Monitoring Stations Per Post; Air Filter Collection Twice A Week; A Total Of 30 Air Filters Collected Weekly For 52 Weeks Per Year; Total Of 1560 Air Filters Annually. No Accredited Radiochemistry Laboratory In Hawaii To Conduct Analysis; Analysis By A Mainland Laboratory Costs \$1,000 Per Sample;

3 Posts X 5 Stations/Post X 2 Collections Weekly X 52 Weeks/Year X \$1k Per Sample  
= \$1.56 Million.

One Radiation Staff Member Will Travel To Kona Weekly.

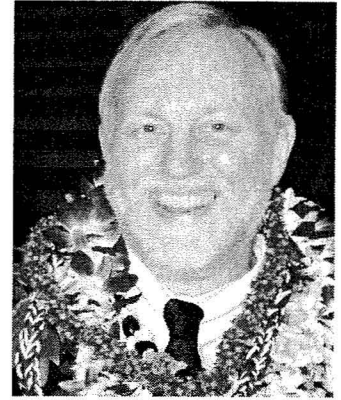
Travel: \$150 Per Week X 52 Weeks = \$7,800

Salary for 1 FTE = \$75,000

Grand Total: \$1.64 Million

**BOB JACOBSON**  
Councilmember

*Chair, Environmental Management Committee  
Vice-Chair, Finance Committee*



**HAWAI'I COUNTY COUNCIL**

*County of Hawai'i*

333 Kilauea Avenue, Second Floor  
Ben Franklin Building, Hilo, Hawai'i 96720  
Mailing Address: 25 Aupuni Street, Suite 200  
Phone: (808) 961-8263  
Fax: (808) 961-8912  
E-Mail: [bjacobson@co.hawaii.hi.us](mailto:bjacobson@co.hawaii.hi.us)

February 24, 2008

To: House Finance Committee Representative Marcus R. Oshiro, Chair,  
Representative Marilyn B. Lee, Vice-Chair and Members

Topic: Supportive testimony for HB2076 FIN on Monday, 02-25-08 at 2:45 pm in House  
conference room 308

Dear Representatives,

On behalf of my constituents and myself I ask you to please pass SB2076 that will require 24-hour air sampling by both the military and an independent organization such as Malu `Aina Center For Non-violent Education & Action or Dr. Lorrin Pang. These samples must also be taken from areas outside of military installations; especially in areas of prevailing winds.

Since 1996, I have spoken with each of the various PTA Base Commanders over the years and, to a man, each vehemently denied that any DU had ever been used at PTA. When asked how they knew this they told me that they knew of all records of weapons use and could state their view without any doubt. Sadly, testing has since proven them to be wrong. Live long-term testing and monitoring are the only way for us to protect the health of the people of the State of Hawai'i as each one of us has sworn to do. The time for unquestioned trust of the military regarding environmental matters has long expired. Many times base commanders seem to be denied the information they need to protect their credibility.

Sincerely,

House of Representatives  
Twenty-Fourth Legislature  
Regular Session of 2008

COMMITTEE ON FINANCE

Hearing  
Monday, February 25, 2008  
2:45 p.m.

Testimony by: Ralph C. Boyea, Legislative Advocate, Hawai'i County Council

**Testimony in favor of HB 2076 RELATING TO DEPLETED URANIUM**

Chairperson Oshiro  
Vice Chairperson Lee and Honored Representatives,

On behalf of the Hawai'i County Council, I urge you to pass House Bill 2076. House Bill 2076 requires that the Department of Health establish air sampling stations to monitor for levels of depleted uranium.

In 2005 the U.S. Military discovered that spotting rounds containing depleted uranium had been used [fired] at Schofield Barracks on Oahu and at the Pohakuloa training facility on the island of Hawai'i. The military reports that these spotting rounds were used in training activities sometime between 1960 and 1968. Weapon casings and "fragments" of these depleted uranium containing casings have been found at both of these facilities. While the military contends that these fragments are far too large to travel any distance in the air, there appears to be no sure way of knowing how small some of these 'fragments' may be. The smaller they may be, the greater the possibility that they could travel considerable distances in the air if the ground where they are located is disturbed.

The military contends that depleted uranium is 40% less radioactive than uranium. It is still radioactive enough to be controlled by the nuclear regulatory commission {NRC}.

Members of the public have expressed concerns that depleted uranium in the air is the cause of a number of health problems. Depleted uranium has been implicated in Gulf War Syndrome and other illnesses of unknown origin in our military personnel.

It is more than appropriate to monitor the air around the facilities where DU was used. Air sampling should be continuous, over an extended period of time.

We urge you to support HB 2076.

**TESTIMONY BEFORE THE HOUSE FINANCE COMMITTEE  
RELATED TO H.B. 2076**

**February 25, 2008**

Chairman Oshiro, Members of the Committee, I am Dr. James W. Morrow. Since it has been at least 15 years since I last testified at a legislative hearing, allow me to very briefly give you some background about myself. My education and degrees are in biochemistry and public health science. I have been an air quality consultant in Hawaii since 1974 working throughout the Pacific area doing air quality impact analyses, air permitting, air monitoring, and assisting governments establish air pollution control programs. During the 1980's and early 1990's, I served on the State's Environmental Quality Commission, Environmental Council and Department of Health Air Advisory Committee. Until its closure in 2000, I was also on the clinical faculty at the UH School of Public Health, lecturing on air pollution health effects and lung disease.

My testimony today is solely on my own behalf and not on behalf of any of my current or former clients or employers. I would now like to offer the following comments and suggestions regarding the nature of uranium in the air environment and its potential health effects as they relate to H.B. 2076.

Uranium occurs naturally in the environment. During the late 1980's and early 1990's, we conducted a multi-year study of the volcanic aerosol ("VOG") on the Big Island. Hundreds of air samples were collected at Hilo, Captain Cook and Kalapana. These samples were analyzed for their chemical content including uranium which was found at very low levels [less than 0.001 microgram per cubic meter of air]. For comparison, the World Health Organization guideline for long-term exposure to uranium is 1.0 microgram per cubic meter of air which is intended to protect the public from the chemical effects of uranium. The WHO also has a radiation guideline for uranium which is a dose not to exceed 100 millirem per year above the normal background level. Based on our VOG studies, the background dose due to naturally occurring uranium at those Big Island areas would be less than 1 millirem per year. The WHO does not distinguish between natural uranium and depleted uranium (DU) in setting its guidelines because chemically, uranium is uranium and DU is only different in that it is less radioactive.

In order to assess the potential health impacts of the 714 DU-containing M-101 spotter rounds that the Army reported had been brought into Hawaii in the 1960's, we conducted a computer modeling analysis using the EPA model that has been used for many years in permitting air pollution sources throughout the U.S. This was a "worst case" analysis in which 100 of those DU rounds were assumed to be located at a single spot in the Pohakuloa Training Area (PTA) impact zone and struck by a high explosive munition that aerosolized all the rounds. In other words, those 100 rounds were converted into a cloud of inhalable sized particles of DU. The model then dispersed that cloud downwind under artificially adverse meteorological conditions. This explosion and dispersion were assumed to occur at 8:00 a.m. every day for one year. The scenario was then repeated at 2:00 p.m. every day of the year and then at 12:00 midnight every day of the year. The three scenarios were intended to account for the varying meteorological

**TESTIMONY BEFORE THE HOUSE FINANCE COMMITTEE  
RELATING TO H.B. 2076  
February 25, 2008**

conditions which occur in the morning, afternoon and late night. The maximum annual average DU concentrations were computed at the PTA boundaries for each of these "worst case" scenarios. The result was that the maximum annual DU concentration found on the PTA boundaries was 0.25 microgram per cubic meter of air which occurred in the 12:00 midnight scenario. Annual radiation dose at this level is estimated at less than 20 millirem.

From these "worst case" results we conclude that it is highly unlikely that the DU rounds which may be remaining in the PTA impact zone will have any significant effect on ambient air quality beyond the PTA boundaries. If we made the analysis slightly more realistic and assumed that all 700+ DU rounds were at PTA and that they were detonated 100 at a time for 7 days, the annual average DU concentration would drop to 0.0007 microgram per cubic meter of air and the estimated annual radiation dose would be 0.06 millirem. If we factored in realistic meteorological conditions and weapons firing, the levels would go even lower. At such low levels the DU will simply become another less radioactive component of the naturally occurring uranium, i.e., it will be lost in the background. And, needless to say, such levels are well below the 1.0 microgram per cubic meter WHO guideline for public health protection.

I would also advise you that we have been conducting baseline air quality monitoring in the PTA area since early 2006. The sample filters have been carefully controlled, accompanied by chain-of-custody forms and have been archived at the mainland laboratory that initially provided them. When the Army's DU investigation team discovered this, we were asked to provide those filters for DU analysis. The transfer of over 400 of those filters is currently in progress.

Based on the foregoing, I would respectfully suggest the following:

- defer the requirement for DOH monitoring in the PTA area until the results of the 400+ filters analyses are released;
- do not expend resources to monitor radiation in the PTA area due to the reduced radiation associated with DU unless the 400+ filters show significant uranium levels;
- if air monitoring is required, it should be for total airborne uranium which can be compared to WHO health guidelines;
- given the low probability of finding any significant airborne uranium, do not make this a long-term monitoring requirement for the DOH;
- on lines 6 & 7 of Section 1 of H.B. 2076, change the words "where depleted uranium rounds [are] used" to "where depleted uranium rounds were used" (Army Regulation 385-63, Section 2-5(a)(3) specifically prohibits the use of depleted uranium ammunition).

Thank you for providing the opportunity to present testimony on this important bill.



**TESTIMONY BEFORE THE HOUSE FINANCE COMMITTEE  
RELATING TO H.B. 2076  
February 25, 2008**

VOG studies  
AR 385-63 prohibits DU use  
Modeling analysis  
PTA monitoring & filter xfer  
focus on uranium, not DU  
Not a radiation issue  
ICRP - Intl Commission on Radiological Protection

At a normal breathing rate, that means people in those areas normally inhale less than 0.009 microgram per day or less than 3 micrograms per year of uranium. To add some perspective, the World Health Organization (WHO) reports that on average the human body has approximately 90 micrograms of uranium stored in various organs and tissues from normal intake of water, food and air.

TESTIMONY SUPPORTING H.B. 2076 RELATING TO DEPLETED URANIUM  
BY BEVERLY ANN DEEPE KEEVER, PH.D. BEFORE  
THE HOUSE COMMITTEE ON FINANCE  
FEBRUARY 25, 2008, 2:45 P.M., CAPITOL ROOM 308

I support this urgently needed bill. It is prudent for the Legislature to ensure the health of Hawaii's people by mandating the state Department of Health to collect data on depleted uranium contamination independent of pronouncements from U.S. government officials at any level.

In supporting this bill, I would like to share with the committees the results of my published research written as a professor of journalism at the University of Hawaii in a book titled *News Zero: The New York Times and The Bomb*.

In a first-of-its-kind, across-time investigation, my book found that the U.S. government at the beginning of the atomic-bomb age had omitted or obscured the defining—and deadly—feature of atomic weapons: radiation and radioactivity. Complicit with the U.S. government was the nation's leading newspaper, *The New York Times*. This omission about radiation and radioactivity, which I call News Zero, kept in the dark for years the unsuspecting lay public, out-of-the-loop opinion leaders, at-risk production workers, U.S. servicemen and Pacific Islanders. This omission may be continuing today in the case of depleted uranium.

Moreover, at the dawn of the atomic-bomb age, air sampling stations like those called for in this bill were established by the U.S. government worldwide so as to monitor the radioactivity resulting from nuclear weapons testing in the Pacific. This air sampling monitoring was effective. Within days after a Pacific weapons test, radioactivity was measured over San Francisco.

The 86 Pacific tests surveyed in my book account for 73.5 percent of the yield of all 1,054 nuclear tests conducted by the U.S. government worldwide through 1992, when it ceased all nuclear testing. **These Pacific tests over the 16-year period from 1946-1962 totaled up to at least 128,704 kilotons—or the equivalent of 10.31 Hiroshima-size bombs per week or 1.47 per day.**

Results of the state's monitoring called for in this bill will add to the growing body of knowledge about the

health and environmental effects of depleted uranium. Even now, within 0.06 seconds, Google Scholar turns up links to 10,600 academic articles and some discuss adverse impacts.

Thank you for holding hearings on this significant bill and permitting me to comment.

Beverly Ann Deepe Keever, Ph.D.

TESTIMONY SUPPORTING H.B. 2072 ON VETERANS  
BY BEVERLY ANN DEEPE KEEVER, PH.D. BEFORE  
THE HOUSE COMMITTEE ON PUBLIC SAFETY & MILITARY AFFAIRS,  
COMMITTEE ON HEALTH AND  
COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
FEBRUARY 14, 2008, 11 A.M., CAPITOL ROOM 309

I support this bill.

At the dawn of the atomic-bomb age, the U.S. government began its poor record of keeping in the dark its own military personnel of the dangers of radioactivity emanating from uranium- and plutonium-emitting weapons, I reveal in my book titled *News Zero: The New York Times and The Bomb*, which I researched and wrote as a professor of journalism at the University of Hawaii at Manoa.

For example, the U.S. troops who entered Hiroshima and Nagasaki shortly after the atomic-bombing of those cities were given no information about or protections against the dangers of radioactivity lingering in those areas.

Yet, at the highest levels of the U.S. government, top generals, scientists and policymakers were well aware of the hazards of radioactivity—and instituted safety measures for themselves and their workplaces.

This same silence about the dangers of radioactivity befell the U.S. service personnel engaged in the first Pacific nuclear weapons tests, where the yield over 16 years equaled 1.47 Hiroshima-size bombs per day.

This same silence should not be allowed to be extended today to the Hawaii national guard.

Thank you for hearing this bill. Please pass it and urge that it be adequately funded.

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Beverly Ann Deepe Kever, Ph.D.

House Sergeant At Arms:

FAX: 586-8504

Beverly Ann Deepe Keever, Professor, University of Hawaii  
Requests that the following four faxed pages be delivered  
to the joint hearing  
on **FEB. 14, 11 A.M.**

For the  
House Committee on Public Safety and Military Affairs  
Committee on Health  
Committee on Energy and Environmental Protection

**On H.B. 2076**

Number of copies requested by the committees are not  
specified.

Mahalo.

Beverly Keever

## FINtestimony

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**From:** bonnie morgan [artsyoceanic@yahoo.com]  
**Sent:** Friday, February 22, 2008 12:07 PM  
**To:** FINtestimony  
**Subject:** Fwd: Chair Oshiro ,vice-chair Lee ,and members re:HB2076 AIR TESTING FOR DEPLETED URANIUM

*bonnie morgan* <artsyoceanic@yahoo.com> wrote:

Date: Mon, 18 Feb 2008 15:06:34 -0800 (PST)  
From: bonnie morgan <artsyoceanic@yahoo.com>  
Subject: Chair Oshiro ,vice-chair Lee ,and members re:HB2076 AIR TESTING FOR DEPLETED URANIUM  
To: finance commitee <fin@capitol.hawaii.gov>

House Finance Committee  
HB 2076: Air Testing for Depleted Uranium

Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

My name is Bonnie Morgan at 5095 Napilihau #109B-311 Lahaina Hi 96761..

I totally agree with the testimony below and hope that you will take the measures necessary to strenghten this bill .It is my belief that this is a crucial issue facing our islands regarding the health and safety of residents and visitors alike and is something that should not be hesitated on for one minute .The fact that they are dropping these huge dummy bombs on the big island without regard to the effect of the disturbed grounds upon impact and the spreading of huge clouds of dust through out the area is not acceptable .Not to mention the fact of the damage done to the fragile ecosystem of our sacred lands .It is our duty to take the steps to protect our people and lands of Hawaii and we look to you our elected officials to step up to the plate and swing hard to do what is moraly right for all concerned ..

Please support and strengthen HB 2076

Dr. Rosalie Bertell, one of the world's foremost mathematicians and a nuclear expert for the past 50 years, says a good example of what radioactivity is.... a little period at the end of a sentence (.) is about the same as a milligram of uranium and shoots about 1,251,000 powerful little "bullets" or Alpha particles a day. (for 4.5 billion years)

The Health Dept. has stated that they have made arraignments with the EPA to start "initial" air monitoring for radiation on, or around Feb. 16th, identifying an initial site.

I would like to see the wording on this bill much more strengthened.  
 First of all, the Health Dept. says "one initial site", HB 2076 says "stations" (sites) plural.  
 I would like to see this clarified, is it singular or plural monitoring sites?

Will this/these site/sites be at Schofield Barracks, Pohakuloa Training Area, Makua: and will Kaho'olawe be monitored also?

While I am no air quality expert, just an average citizen, there seems to be some controversy in regard to how air quality/radiation is measured. The Health Dept. says it will only report and address "averaged" sustained measurements over three times background radiation levels.

Residents are also concerned with "spikes" of radiation that can only be caught through continuous monitoring. Hawaii Island residents have proven, easily and inexpensively, that constant monitoring can be published online, for all to see, and this should be included in HB 2076.

While many residents would still very much like to see an independent radiation expert monitoring and interpreting radiation levels and data in air, (soil and water). I am hoping our Health Dept. will act in good faith with the absolute protection of Hawaii residents first and foremost on their list, with transparent method, analysis, and interpretation for all residents to see, with their, (Health Dept.) own investigations apart from just believing whatever they are told as to radiation in air, (soil and water) quality in the State of Hawaii. (and not testify against this bill)

Residents on three islands are worried and we want the absolute truth as to whether we and our visitors are being contaminated by radiation from training ranges, past and present; to do otherwise is unforgivable by our Health Dept. and by our legislature.

....And we wonder why none of these entities will not spend \$550 to test a human resident for depleted uranium.

I also agree with the points below, made by Jim Albertini of Kurtistown, Hi.

1. The full extent of Military radiation contamination at Hawaii live-fire ranges is unknown. Given the history of military deception, the extent of contamination is likely to be much greater than what's been admitted to date.
2. Military radiation contamination has been confirmed at Schofield Barracks and Pohakuloa Training Area. All present and former live-fire ranges could be contaminated and should be tested for contamination.
3. Military radiation contamination, especially with depleted uranium (DU) munitions, pose significant hazards from inhalation.
4. Air monitoring should be established 360 degrees around confirmed sites to see if the radiation is moving off site. The monitoring should be continuous with a paper trail and available to citizens in real-time via home computers. It is the spikes of elevated radiation that are a particular concern. Scientific studies have confirmed DU moving more than 26 miles off site in Albany, NY.
5. Senator Daniel Inouye should assist with providing federal funds to deal with a federal problem. However, there should be transparent independent testing of not only the air, but water and soil. After all, the U.S. military is spending \$2 billion a

day. There should be funds available to see if citizens are being contaminated by their own radioactive weapons.

6. There should be an immediate halt to all live-fire and any activity that creates dust at all ranges where radiation has been confirmed, since such activities could result in the spread of airborne particles which are particularly hazardous if inhaled.

Mahalo,  
Shannon Rudolph  
P.O. 243  
Holualoa, Hi. 96725



## FINtestimony

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**From:** Jonathan Cole [joncole@gmail.com]  
**Sent:** Friday, February 22, 2008 11:50 AM  
**To:** FINtestimony  
**Subject:** HB 2076

I am in complete support of HB 2076 and I concur with the letters submitted by Rudolph and Albertini, copied below.

Jonathan R Cole  
44-3039 Kalopa Mauka Road  
Honokaa, Hawaii 96727  
Tel. 775 9145

House Finance Committee  
HB 2076: Air Testing for Depleted Uranium  
Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

Please support and strengthen HB 2076

Rosalie Bertell, one of the world's foremost mathematicians and a nuclear expert for the past 50 years, says a good example of what radioactivity is.... a little period at the end of a sentence (.) is about the same as a milligram of uranium and shoots about 1,251,000 powerful little "bullets" or Alpha particles a day. (for 4.5 billion years)

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Residents are also concerned with "spikes" of radiation that can only be caught through continuous monitoring. Hawaii Island residents have proven, easily and inexpensively, that constant monitoring can be published online, for all to see, and this should be included in HB 2076.

While many residents would still very much like to see an independent radiation expert monitoring and interpreting radiation levels and data in air, (soil and water). I am hoping our Health Dept. will act in good faith with the absolute protection of Hawaii residents first and foremost on their list, with transparent method, analysis, and interpretation for all residents to see, with their, (Health Dept.) own

investigations apart from just believing whatever they are told as to radiation in air, (soil and water) quality in the State of Hawaii. (and not testify against this bill)

Residents on three islands are worried and we want the absolute truth as to whether we and our visitors are being contaminated by radiation from training ranges, past and present; to do otherwise is unforgivable by our Health Dept. and by our legislature.

....And we wonder why none of these entities will not spend \$550 to test a human resident for depleted uranium.

I also agree with the points below, made by Jim Albertini of Kurtistown, Hi.

Mahalo, Shannon Rudolph  
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5. Senator Daniel Inouye should assist with providing federal funds to deal with a federal problem. However, there should be transparent independent testing of not only the air, but water and soil. After all, the U.S. military is spending \$2 billion a day. There should be funds available to see if citizens are being contaminated by their own radioactive weapons.
6. There should be an immediate halt to all live-fire and any activity that creates dust at all ranges where radiation has been confirmed, since such activities could result in the spread of airborne particles which are particularly hazardous if inhaled.

## FINtestimony

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**From:** shannon rudolph [shannonkona@gmail.com]  
**Sent:** Friday, February 22, 2008 11:27 AM  
**To:** FINtestimony  
**Subject:** Fwd: Please Hear, Support, and Strengthen HB 2076

House Finance Committee  
 HB 2076: Air Testing for Depleted Uranium

Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

Please support and strengthen HB 2076

Rosalie Bertell, one of the world's foremost mathematicians and a nuclear expert for the past 50 years, says a good example of what radioactivity is.... a little period at the end of a sentence (.) is about the same as a milligram of uranium and shoots about 1,251,000 powerful little "bullets" or Alpha particles a day. (for 4.5 billion years)

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2/22/2008

....And we wonder why none of these entities will not spend \$550 to test a human resident for depleted uranium.

I also agree with the points below, made by Jim Albertini of Kurtistown, Hi.

Mahalo, Shannon Rudolph  
P.O. 243 Holualoa Hi. 96725

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6. There should be an immediate halt to all live-fire and any activity that creates dust at all ranges where radiation has been confirmed, since such activities could result in the spread of airborne particles which are particularly hazardous if inhaled.

**FINtestimony**

**From:** Markus Broyles [markus.broyles@gmail.com]  
**Sent:** Friday, February 22, 2008 1:47 PM  
**To:** FINtestimony  
**Subject:** Fwd: Fw: Please Hear, Support, and Strengthen HB 2076

When are you people going to get rid of your damn radiation !

----- Forwarded message -----

**From:** **Jonathan Cole** <joncole@gmail.com>  
**Date:** Fri, Feb 22, 2008 at 11:53 AM  
**Subject:** Fw: Please Hear, Support, and Strengthen HB 2076  
**To:** Undisclosed-Recipient

aloha!  
 please submit your testimony! and forward!  
 thanks!  
 Aloha,  
 Jon

**Subject:** Fwd: Please Hear, Support, and Strengthen HB 2076  
**To:** [FINtestimony@capitol.hawaii.gov](mailto:FINtestimony@capitol.hawaii.gov)

House Finance Committee  
 HB 2076: Air Testing for Depleted Uranium  
 Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

Please support and strengthen HB 2076

—Rosalie Bertell, one of the world's foremost mathematicians and a nuclear expert for the past 50 years, says a good example of what radioactivity is.... a little period at the end of a sentence (.) is about the same as a milligram of uranium and shoots about 1,251,000 powerful little "bullets" or Alpha particles a day. (for 4.5 billion years)

The Health Dept. has stated that they have made arraignments with the EPA to start "initial" air monitoring for radiation on, or around Feb. 16th, identifying an initial site.

I would like to see the wording on this bill much more strengthened.  
 First of all, the Health Dept. says "one initial site", HB 2076 says "stations" (sites) plural.  
 I would like to see this clarified, is it singular or plural monitoring sites?

Will this/these site/sites be at Schofield Barracks, Pohakuloa Training Area, Makua: and will Kaho'olawe be monitored also?

While I am no air quality expert, just an average citizen, there seems to be some controversy in regard to how air quality/radiation is measured. The Health Dept. says it will only report and address

2/22/2008

"averaged" sustained measurements over three times background radiation levels.

Residents are also concerned with "spikes" of radiation that can only be caught through continuous monitoring. Hawaii Island residents have proven, easily and inexpensively, that constant monitoring can be published online, for all to see, and this should be included in HB 2076.

While many residents would still very much like to see an independent radiation expert monitoring and interpreting radiation levels and data in air, (soil and water). I am hoping our Health Dept. will act in good faith with the absolute protection of Hawaii residents first and foremost on their list, with transparent method, analysis, and interpretation for all residents to see, with their, (Health Dept.) own investigations apart from just believing whatever they are told as to radiation in air, (soil and water) quality in the State of Hawaii. (and not testify against this bill)

Residents on three islands are worried and we want the absolute truth as to whether we and our visitors are being contaminated by radiation from training ranges, past and present; to do otherwise is unforgivable by our Health Dept. and by our legislature.

....And we wonder why none of these entities will not spend \$550 to test a human resident for depleted uranium.

I also agree with the points below, made by Jim Albertini of Kurtistown, Hi.

Mahalo, Shannon Rudolph  
P.O. 243 Holualoa Hi. 96725

1. The full extent of Military radiation contamination at Hawaii live-fire ranges is unknown. Given the history of military deception, the extent of contamination is likely to be much greater than what's been admitted to date.
2. Military radiation contamination has been confirmed at Schofield Barracks and Pohakuloa Training Area. All present and former live-fire ranges could be contaminated and should be tested for contamination.
3. Military radiation contamination, especially with depleted uranium (DU) munitions, pose significant hazards from inhalation.
4. Air monitoring should be established 360 degrees around confirmed sites to see if the radiation is moving off site. The monitoring should be continuous with a paper trail and available to citizens in real-time via home computers. It is the spikes of elevated radiation that are a particular concern. Scientific studies have confirmed DU moving more than 26 miles off site in Albany, NY.
5. Senator Daniel Inouye should assist with providing federal funds to deal with a federal problem. However, there should be transparent independent testing of not only the air, but water and soil. After all, the U.S. military is spending \$2 billion a day. There should be funds available to see if citizens are being contaminated by their own radioactive weapons.
6. There should be an immediate halt to all live-fire and any activity that creates dust at all

ranges where radiation has been confirmed, since such activities could result in the spread of airborne particles which are particularly hazardous if inhaled.

--  
aloha , markus broyles

## FINtestimony

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**From:** Lisa Long [angelsfortruth@earthlink.net]  
**Sent:** Friday, February 22, 2008 4:52 PM  
**To:** FINtestimony  
**Subject:** Testimony - Please Hear, Support, and Strengthen HB 2076

*Those in BCC please send in your testimony.*

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Please make copies for everyone.

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I agree with Shannon and Jim.. (see below)  
And I do not want to wait a year to find out the results of the monitoring.

Lisa Long  
P.O. Box 369  
Holualoa, Hi 96725

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House Finance Committee  
HB 2076: Air Testing for Depleted Uranium

Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

Please support and strengthen HB 2076

Rosalie Bertell, one of the world's foremost mathematicians and a nuclear expert for the past 50 years, says a good example of what radioactivity is.... a little period at the end of a sentence (.) is about the same as a milligram of uranium and shoots about 1,251,000 powerful little "bullets" or Alpha particles a day. (for 4.5 billion years)

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monitoring. Hawaii Island residents have proven, easily and inexpensively, that constant monitoring can be published online, for all to see, and this should be included in HB 2076.

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6. There should be an immediate halt to all live-fire and any activity that creates dust at all ranges where radiation has been confirmed, since such activities could result in the spread of airborne particles which are particularly hazardous if inhaled.



**FINtestimony**

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**From:** Bill Brooks [energy@hawaiiantel.net]  
**Sent:** Saturday, February 23, 2008 10:56 AM  
**To:** FINtestimony  
**Subject:** Hear, Support and Strengthen HB2076

To Whom It May Concern:

In order to provide your citizens with a safe, healthy and prosperous environment it is of the utmost importance that you support and strengthen HB 2076. It is your duty as elected officials to malama our children and elderly. In fact, every individual that lives here has the right to be protected by our government, not harmed. The islands are dependent upon a beautiful non-toxic habitat to maintain and expand the tourist industry, without this our economy will suffer greatly. So, here is the perfect opportunity to demonstrate to your constituents, the nation and the world that you really care about the air we breathe, the ecology of our pristine islands and what you will leave to future generations.

In closing, I wish to say that I support Mr. Albertini's conclusions regarding the strengthening of HB2076.

Sincerely,

Stephanie Nelson-Brooks

Mr. Albertini's remarks:

1. The full extent of Military radiation contamination at Hawaii live-fire ranges is unknown. Given the history of military deception, the extent of contamination is likely to be much greater than what's been admitted to date.
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problem. However, there should be transparent independent testing of not only the air, but water and soil. After all, the U.S. military is spending \$2 billion a day. There should be funds available to see if citizens are being contaminated by their own radioactive weapons.

6. There should be an immediate halt to all live-fire and any activity that creates dust at all ranges where radiation has been confirmed, since such activities could result in the spread of airborne particles which are particularly hazardous if inhaled.

**Mahalo for your time and effort.**

**Stephanie Nelson-Brooks  
P.O. Box 308  
Holualoa, HI 96725**

## FINtestimony

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**From:** Rob Culbertson [sierran@usa.com]  
**Sent:** Saturday, February 23, 2008 8:44 AM  
**To:** FINtestimony  
**Subject:** HB 2076: air testing for Depleted Uranium

Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

Please support and strengthen HB 2076.

We are waiting for leadership on this issue!

Rob Culbertson  
Paauilo, HI 96776

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Want an e-mail address like mine?  
Get a **free e-mail** account today at [www.mail.com](http://www.mail.com)!

H182076

## FINtestimony

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**From:** PALUMBODON@aol.com  
**Sent:** Monday, February 18, 2008 6:24 PM  
**To:** FIN-Jo  
**Subject:** DU on Hawaii Island

My family moved here from the New York Metro area 2 1/2 years ago. We are very sophisticated about pollution issues.

We are horrified to learn about DU and the probability that it is getting kicked up every time the military drops an inert B-2 bomb on PTA, not to mention the fact that with the winds being what they are here, every day could be an occasion for DU nano particulates to be blown our way.

I have personally sat in on every DU meeting that Rep. Cindy Evans held - Our military admits we do not yet know the health effects of DU exposure...

But, there are many, many sources within the scientific community that believe they DO know the health effects of DU, and it is a very disturbing picture.

A little research on your part, and you will see that the Hawaiian Islands are heavily contaminated by military activities over the years.

It may be "critical" that the military be stationed here, but even more "critical" is the fact that we have exposed innocent civilians to one of the deadliest radioactive substances on the planet - on an ongoing basis.

Thank you,  
Betsy Palumbo

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Delicious ideas to please the pickiest eaters. [Watch the video on AOL Living.](#)

## FINtestimony

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**From:** bonnie morgan [artsyoceanic@yahoo.com]  
**Sent:** Sunday, February 24, 2008 1:08 PM  
**To:** FINtestimony  
**Subject:** Fwd: Chair Oshiro ,vice-chair Lee ,and members re:HB2076 AIR TESTING FOR DEPLETED URANIUM

*bonnie morgan <artsyoceanic@yahoo.com>* wrote:

Date: Sun, 24 Feb 2008 15:06:20 -0800 (PST)  
From: bonnie morgan <artsyoceanic@yahoo.com>  
Subject: Fwd: Chair Oshiro ,vice-chair Lee ,and members re:HB2076 AIR TESTING FOR DEPLETED URANIUM  
To: FINtestimony@capitol.hawaii.govv

*bonnie morgan <artsyoceanic@yahoo.com>* wrote:

Date: Fri, 22 Feb 2008 14:06:38 -0800 (PST)  
From: bonnie morgan <artsyoceanic@yahoo.com>  
Subject: Fwd: Chair Oshiro ,vice-chair Lee ,and members re:HB2076 AIR TESTING FOR DEPLETED URANIUM  
To: fintestimony@capitol.hawaii.gov

*bonnie morgan <artsyoceanic@yahoo.com>* wrote:

Date: Mon, 18 Feb 2008 15:06:34 -0800 (PST)  
From: bonnie morgan <artsyoceanic@yahoo.com>  
Subject: Chair Oshiro ,vice-chair Lee ,and members re:HB2076 AIR TESTING FOR DEPLETED URANIUM  
To: finance commitee <fin@capitol.hawaii.gov>

House Finance Committee  
HB 2076: Air Testing for Depleted Uranium

Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee  
Members,

My name is Bonnie Morgan at 5095 Napilihau #109B-311 Lahaina Hi  
96761..

I totally agree with the testimony below and hope that you will take the

measures necessary to strengthen this bill .It is my belief that this is a crucial issue facing our islands regarding the health and safety of residents and visitors alike and is something that should not be hesitated on for one minute .The fact that they are dropping these huge dummy bombs on the big island without regard to the effect of the disturbed grounds upon impact and the spreading of huge clouds of dust through out the area is not acceptable .Not to mention the fact of the damage done to the fragile ecosystem of our sacred lands .It is our duty to take the steps to protect our people and lands of Hawaii and we look to you our elected officials to step up to the plate and swing hard to do what is morally right for all concerned ..

Please support and strengthen HB 2076

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Mahalo,  
Shannon Rudolph  
P.O. 243  
Holualoa, Hi. 96725

## FINtestimony

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**From:** Maui Peace Action [mauipeaceaction@earthlink.net]  
**Sent:** Sunday, February 24, 2008 9:23 AM  
**To:** FINtestimony  
**Subject:** sUPPORT FOR HB2076

House Finance Committee  
In support of HB 2076: Air Testing for Depleted Uranium

Aloha Chairman Oshiro, Vice- Chair Lee, and Finance Committee Members,

Please support and strengthen HB 2076. I am writing on behalf of Maui Peace Action, an organization will over 800 supporters on Maui, which is very concerned about the radiation that has been detected in Hawaii at sites on Oahu and the Big Island.

We agree with the points below, made by Jim Albertini of Kurtistown, Hi.

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Mahalo,

2/24/2008

Mele Stokesberry, President

Maui Peace Action, P. O. Box 880231, Pukalani, HI 96788

[www.mauipeace.org](http://www.mauipeace.org)