

## REQUEST FOR HEARING AND PETITION FOR LEAVE TO INTERVENE

re. license amendment and issuance for  
Source Materials License No. SUC-1593, Amendment 2, Davy Crockett Depleted Uranium  
at Various United States Army Installations  
as described in the Federal Register, February 9, 2017, p. 10031

### (1) PETITIONER

Ruth-Rebeccalynne Tyana Lokelani Aloua

### (2) RIGHT TO PETITION

I am a Kanaka Maoli (Native Hawaiian) descended from the original inhabitants of the Hawaiian Islands pre-1778. My grandmothers lineage binds me to the Keli'i-Ho'omanawanui of Hawai'i and my grandfathers to the Hoapili of Maui. I was raised in the ahupua'a of Kealakehe that is located in the Kekaha Region of Kona along the western flanks of Hualālai.

I am a kia'i loko (fishpond guardian) at Kaloko Fishpond in Kailua-Kona. I conduct outreach and education activities to engage community members in aloha 'āina activities. We aim to rehabilitate the fishpond as a food producing structure by healing the people and place through 'āina and kai based hands-on- activities.

I am a kia'i mauna (mountain guardian) for both Hualālai and Mauna a Wākea. The waters that I was raised drinking as a child flowed from Hualālai. These are the waters that give the people and places that have raised me life. The waters that I drink today flow from Mauna a Wākea. These are the same waters that feed our plants and quench the thirst of our animals.

I am a mahi'ai (farmer) who manages a privately owned farm and is a full time live-in caretaker in Waiki'i Ranch. I oversee the management and production of our produce and care of the animals. At our farm we grow a variety of organic produce like leafy greens, legumes, brassica, root crops, herbs and more. The food that we grow is sold to customers through CSA baskets and at the weekly Waimea farmers market. We also raise various breeds of animals like sheep, goats, cattle, chickens, ducks, geese, pigs, turkeys and more. The majority of the food that my partner and I consume is grown and raised on the farm.

As a resident of Waiki'i Ranch, located about 2 miles away from PTA, I hear the sounds of countless bombs exploding for several days at a time from the early morning till late at night when training occurs. Explosions often shake our home, wake me from my sleep, and keep me awake. Jets ripping through the sky add to the stress that I experience. These intrusive sounds, combined with, the shaking of the earth greatly disturbs our animals leading them to act out of character. They will often cry, act erotic and stampede when bombs are detonated.

As a Kanaka Maoli I recognize and acknowledge my genealogical relationship to the 'āina (land). This relationship teaches me to honor Papahānaumoku (Earth Mother) by ensuring that the places that nourish me spiritually, emotionally and physically are protected and unharmed. My family, who live on the western flanks of Hualālai, along with the 'āina that guides me, Kaloko-Honokōhau, may be at threat due to DU being carried on the winds. This has the potential to negatively affect our born and unborn children. The lands that awakened the heart of my hands to the earth, Waiki'i, is potentially threatened by contamination as well. The animals that I am responsible for trust me to keep them safe as do the people I feed, including my spouse. To give them the quality of life that they deserve I must be sure that the conditions the animals are raised and food is grown is uncontaminated. As a descendant of Papahānaumoku, a kia'i loko of Kaloko Fishpond, a kia'i mauna of Hualālai and Mauna a Wākea, and a mahi'ai of Waiki'i I step forward to protect these people and places from harm. The presence of DU and the potential harm this poses to humans, plants, animals and elements require me to step forward as a petitioner in this case. I am concerned about the health issues and effects of depleted uranium (DU) on myself, our farm crops and animals, soldiers at PTA, and our born and unborn children.

### (3) PETITIONER'S INTEREST

I live about 5 miles from Pohakuloa Training Area (PTA) in Waiki'i Ranch. I am concerned about the effects of depleted uranium on my health.

### (4) EFFECT OF DECISION ON PETITIONER'S INTEREST

If the Nuclear Regulatory Commission (NRC) takes the actions listed below, that will address my interest.

## SUMMARY OF CONTENTIONS

*Note: The summary contentions listed below are identical to those filed by Hāwane Rios*

(A) United States Military seized 84,000 acres of land through Presidential Executive Order 11167 (Page 4-6). These are Hawaiian Kingdom lands that were illegally seized and remain illegally occupied;

(B) State General Lease No. S-3849 leased more than 22,000 acres to the United States Military for 65 years charging \$1.00 per year. Lease conditions state that the United States of America shall “remove or bury all trash, garbage and *other waste materials* [emphasis added] resulting from Government use of the said premise” (Page 7-8). Other waste materials should be inclusive of depleted uranium and thereby require removal;

(C) In 2007, the Army confirmed that it has used Depleted Uranium (DU) radiation weapons at PTA dating back to the 1960s. The number of DU rounds fired is not known but the Army has said it is prohibited from firing DU weapons in training at PTA since 1996. Comprehensive, independent, testing and monitoring to determine the full extent of radiation contamination has yet to be done and should be conducted;

(D) Require the U.S. Military to fulfill requests outlined in Hawaii County Resolution 639-08, (Page 9) passed on July 2, 2008, Urging the United States Military to Address the Hazards of Depleted Uranium at the Pohakuloa Training Area;

(E) Require the army to do air monitoring of depleted uranium in Waiki'i Ranch following recommendations from Dr. Pang, MD, MPH. I am aware of the existing study and would like criticisms by Dr. Lorrin Pang included on the record. These criticisms warrant a second study (Page 10-12); and

(F) I concur with contentions submitted by Hāwane Rios, James Albertini, Cory (Martha) Harden, Dr. Lorrin Pang, and Dr. Michael Reimer.

**Executive Order 11167—Setting Aside for the Use of the United States Certain Public Lands and Other Public Property Located at the Pohakuloa Training Area, Hawaii**

By virtue of the authority vested in me by section 5(d) of the Act of March 18, 1959, providing for the admission of the State of Hawaii into the Union (73 Stat. 5), and as President of the United States, it is hereby ordered as follows—

All lands and other property hereinafter described, being lands and property which were ceded to the United States by the Eepublic of Hawaii under the joint resolution of annexation, approved July 7, 1898 (30 Stat. 750), or which have been acquired in exchange for lands or properties so ceded, are hereby set aside for the use of the United States\* in fee simple subject to valid existing rights—

Portion Of Tract B. Pohakuloa Training Area

Being portions of the Government Lands of Kaobe and Puuanahulu, and the Crown Land of Hummuula.

Being also a portion of Mauna Loa Forest and Game Reserve (Governor's Executive Order No. 1288, dated December 2, 1948).

Situated at Kaohe, Hamakua; Puuanahulu, North Kona; and Hummuula, North Hilo; Island of Hawaii, State of Hawaii.

Beginning at a point on the northeast boundary of this piece of land, the coordinates of said point of beginning from Government Survey Triangulation Station "OMAOKOILI" being 6,664.51 feet South and 3,954.19 feet West, thence running by azimuths measured clockwise from true South:

1. 336°22' 21,800.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
2. 82°05' 17,400.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
3. 120°00' 3,900.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
4. 44°10' 3,900.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
5. 82°05' 8,100.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
6. 360°00' 16,900.95 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);

7. 90°00' 33,877.72 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288) ; to the boundary between Kaohe and Keauhou;
8. 149°40'51.4" 37,269.00 feet along Keauhou to "Naohueleelua;"
9. UI°14'54" 2,500.00 feet along Keauhou;
10. 166°06'51" 12,329.90 feet along the remainder of Puuanahulu;
11. 221°36'51" 15,850.00 feet along the remainder of Puuanahulu;
12. 269°10' 21,730.00 feet along the remainder of Puuanahulu and Mauna Loa Forest and Game Reserve;
13. 179°29' 1,132.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
14. 265°10' 3,000.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
15. 259°40' 3,700.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
16. 202°30' 1,300.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
17. 238°00' 3,600.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
18. 290°00' 4,700.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
19. 270°48' 1,670.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
20. 296°30' 2,900.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
21. 254°20' 3,300.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
22. 293°50' 9,600.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
23. 28°30' 1,100.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);

24. 298°30' 1,400.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
25. 208°30' 800.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
26. 291°10' 6,000.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
27. 334°39' 1,540.00 feet along the remainder of Mauna Loa Forest and Game Reserve (Governor's Executive Order 1288);
28. 316°30' 14,800.00 feet to the point of beginning and containing an area of 84,057 acres, more or less.

LYNDON B. JOHNSON

The White House,

August 15, 1964.

RECORDATION REQUESTED BY:  
U. S. Army Engineer Division,  
Pacific Ocean

STATE OF HAWAII  
BUREAU OF CONVEYANCES  
RECEIVED FOR RECORD

LIBER 4821 PAGES 425 TO 444

AFTER RECORDATION, RETURN TO:

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U. S. Army Engineer Division,  
Pacific Ocean  
Phone: 542986

/s/ M. Adachi  
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RETURN BY: MAIL ( ) PICKUP (X)  
SPACE ABOVE THIS LINE FOR REGISTRAR'S USE

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE GENERAL LEASE NO. S-3849  
U. S. LEASE, CONTRACT NO. DA-94-626-ENG-80

1. THIS LEASE, made and entered into this 17<sup>th</sup>  
day of AUGUST, in the year one thousand nine hundred  
and sixty-four by and between the STATE OF HAWAII, represented  
by its Board of Land and Natural Resources, whose address is  
P. O. Box 621, Honolulu, Hawaii, 96809, and whose interest in  
the property hereinafter described is that of fee simple  
owner, for itself, its administrators, successors and assigns,  
hereinafter called the "Lessor", and THE UNITED STATES OF  
AMERICA, hereinafter called the "Government":

WITNESSETH: The parties hereto for the considera-  
tion hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government  
three (3) parcels of land described on Exhibit "A" attached  
hereto and hereby made a part hereof, all to be used for the  
following purpose: Military purposes.

POHAKULOA

the premises shall be familiar with said standard procedure including the means of implementation.

14. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with training activities, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

15. Except as required for defense purposes in times of national emergency, the Government shall not deliberately appropriate, damage, remove, excavate, disfigure, deface or destroy any object of antiquity, prehistoric ruin or monument.

16. The Lessor shall have the right to erect signs and construct capital improvements within the leased property at locations mutually agreed upon by the parties hereto, in connection with water conservation, public water consumption, forestry, recreational and related purposes, said capital improvements including but not limited in any way to the construction, maintenance and/or improvements of roads and trails; provided, however, that notwithstanding any other provisions of this lease to the contrary, the Government

**RESOLUTION 639-08**  
**URGING THE UNITED STATES MILITARY TO ADDRESS THE HAZARDS OF**  
**DEPLETED URANIUM AT THE POHAKULOA TRAINING AREA.**

WHEREAS, in the early 1960's the United States Military used the Pohakuloa Training Area for firing a formerly classified weapon, the Davy Crockett recoilless gun, which has created the presence of depleted uranium (DU) in the impact area at the U.S. Army Garrison, Pohakuloa; and

WHEREAS, the World Health Organization has released several reports and scientific studies concerning the health risks from exposure to depleted uranium; and

WHEREAS, depleted uranium is a chemically toxic and radioactive heavy metal with a half-life of 4.6 billion years; and

WHEREAS, depleted uranium emits radioactive alpha particles that can cause cancer when inhaled or ingested and also cause kidney and lung damage; and

WHEREAS, there is a public health need to ensure the safe storage, disposal, and clean-up of munitions and other products or materials containing depleted uranium at the Pohakuloa Training Area to protect all residents of Hawai'i Island; and

WHEREAS, the United States Military is hereby requested, with urgency, to address the potential hazards of depleted uranium at the Pohakuloa Training Area with the following five-point plan:

1. Ordering a complete halt to B-2 bombing missions and to all live firing exercises and other activities at the Pohakuloa Training Area that create dust until there is an assessment and clean up of the depleted uranium already present;
2. Establishing a permanent, high-tech monitoring system with procedures to ensure air quality control;
3. Establishing a citizen monitoring system to work closely with Military experts to assure transparency and community confidence;
4. Hosting quarterly meetings to update and inform the public; and 5. Ensuring permanent funds are available for the monitoring program; now, therefore,

BE IT RESOLVED BY THE COUNCIL OF THE COUNTY OF HAWAII that the U.S. Military will incorporate the five-point plan to address the potential hazards of depleted uranium at the Pohakuloa Training Area.

BE IT FINALLY RESOLVED that the County Clerk shall forward a copy of this resolution to Colonel Howard Killian, Deputy Region Director, Army Installation Management Command-Pacific; all members of the Hawai'i State Legislature; Senator Daniel K. Inouye; Senator Daniel K. Akaka; Congressman Neil Abercrombie, and Congresswoman Mazie K. Hirono.

## Waikī i Ranch "NO DU" Claims Unwarranted!

(Source:[http://www.islandbreath.org/2008Year/10-health\\_food/0810-14Depleted238minor.html](http://www.islandbreath.org/2008Year/10-health_food/0810-14Depleted238minor.html))



image above: From 1830 uranium was used to color glassware! See [www.neatorama.com](http://www.neatorama.com)  
In 1959, the switch was made to depleted uranium (DU). All of the items shown here contain natural uranium except the tube on the right which contains depleted uranium. At present (2004), a few companies in the U.S. are still making Vaseline glass (e.g., Boyd Crystal Art Glass, Mosser, Summit Glass and Fenton Glass), but it is exclusively of the decorative variety. No dinnerware is being made. It is estimated that there were at least 4,160,000 pieces of decorative uranium glass produced in the US between 1958 and 1978 and 15,000 drinking glasses from 1968 to 1972.

Live-fire halt and clean-up needed!  
by Jim Albertini on 22 July 2008

A July 15, 2008 press release issued by the Waikīi Ranch Homeowners Association (WRHOA) and headlined "Waikīi Ranch Dust Samples Show No Depleted Uranium" is receiving a skeptical response from local and international scientific experts. Results of the test, based on a sample taken by Waikīi Ranch Depleted Uranium Project Manager, David Bigelow, and sent to a laboratory in England for analysis, were reported in the Hawaii Tribune-Herald on July 17 and more extensively on July 22, 2008.

The release's one-line heading contains two inaccuracies: it speaks of "samples" in the plural, when in fact there was only one; it claims "No Depleted Uranium", yet goes on to admit that "the amount of DU found in the sample was found to be statistically insignificant."

Regarding the first misleading statement, Dr. Lorrin Pang, MD, MPH, comments:

"it is hard to do statistics with a sample of one,"

referring to the single dustpan sample depicted on the front page of the newspaper's July 22 issue. Dr. Pang, speaking as private citizen, is retired from the Army Medical Corps, is on the Best Doctors of America list 2006-8, and a consultant to the World Health organization (WHO) since 1985. Russell Takata, state radiation chief, is also on record as questioning WRHOA's methodology.

As to the alleged "insignificance" of the DU being reported as 1/100 the level of the naturally occurring uranium found in the sample, Dr. Rosalie Bertell, PhD, reaches a contrary conclusion. She remarks that the lab report "actually says that there IS DU in the sample. There should be zero.

It is irrelevant that it is 'not significant.'" Dr. Bertell -- who has been honored by the U.N. as a statistician, epidemiologist, and member of the Science Advisory Board, International Joint Commission of the U. S. and Canada -- goes on to say: "What you really want to know is whether or not the uranium found in the sample has been fired. This means electron spectroscopy." Dr. Pang is also skeptical about the term "statistically insignificant." He claims that the laboratory's reading of 1/100 DU, allowing for a measurement error of 1%, could mean the presence of 2% DU in the sample instead of its "zero" interpretation.

Just as the WRHOA's release attempts to give false comfort, the Hawaii Tribune-Herald 7/22 headline is apt to mislead readers into believing that fears about DU contamination are not based in fact. To label tests a "bust" and conclude that "preliminary results find no health hazard" is simply not supported by fact. Closer to the truth is that we have been told little or nothing about whatever tests may have been conducted by the state or federal governments.

Mr Takata refers to "preliminary reviews of about 90% of test results" but gives no data. What about the other 10%? The Army allegedly tested 800 dust samples, but these results have yet to be made available to the state or the public. All of this adds up to sweeping claims of safety, while providing no hard data to back them up.

This has been a repeated pattern over the past several years: claims but no data.

Given the wide range of weapons in the U.S. arsenal that contain DU, and the extensive military live-fire training at Pohakuloa Training Area (PTA), and other military ranges in Hawaii, Jim Albertini of Malu 'Aina says it is reasonable to believe more DU contamination exists in Hawaii than just the Davy Crockett DU weapon contamination from the 1960s currently admitted by the Army. Malu 'Aina has called for action on DU, especially halting all live-fire that could spread military radiation.

Malu `Aina has long said that independent, comprehensive, testing is needed. Now the Hawaii County Council by a vote of 8-1 on July 2nd, has joined the effort by passing resolution 639-08 that addresses the issue. The essence of the resolution is below with the complete text following.

The United States Military is hereby requested, with urgency, to address the potential hazards of depleted uranium at the Pohakuloa Training Area with the following five-point plan:

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3. Establishing a citizen monitoring system to work closely with Military experts to assure transparency and community confidence;
4. Hosting quarterly meetings to update and inform the public; and
5. Ensuring permanent funds are available for the monitoring program.

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