ADDENDUM October 30, 2009

Re. the U.S. Army Installation Command license application (ADAMS Accession No. ML090070095) requesting authorization to possess depleted uranium at two sites in Hawaii, Schofield Barracks on Oahu and Pohakuloa Training Area on the Big Island of Hawai'i.

AIR MONITORING

Introduction

I hereby request that NRC direct the Army to conduct monitoring for airborne DU and DU compounds that follows recommendations from Dr. Lorrin Pang and Dr. Mike Reimer.

Brief explanation of the basis for the contention

See attached e-mails from Dr. Lorrin Pang and Dr. Mike Reimer, and their resumes.

AIR MONITORING ATTACHMENTS

e-mails from Dr. Reimer to Cory Harden
- 9-25-09 (excerpts)
- 10-12-09 (excerpts)
- 10-27-09 5:05 PM

9-22-09 e-mail from Lorrin Pang to Jim Albertini (excerpts)
Dr. Reimer's resume
Dr. Pang's resume

CHARACTERIZATION REPORT

Introduction

I hereby request that NRC direct the Army to conduct an adequate characterization report for Pohakuloa.

Brief explanation of the basis for the contention

See comments from Dr. Reimer and Dr. Marshall Blann, attached.

CHARACTERIZATION REPORT ATTACHMENTS

10-1-09 e-mail from Dr. Reimer to Cory Harden
10-27-09 6:08 PM e-mail from Dr. Reimer to Cory Harden
7-24-09 Comments on Cabrera Services report "Final Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys The Big Island (Hawaii) Hawaii" by Dr. Marshall Blann
Dr. Reimer's resume
Dr. Blann's resume (first two pages only; all 31 pages available on request)

FORGOTTEN HAZARDS

Introduction

I hereby request that NRC direct all military forces, U.S. and foreign, that have trained in Hawai'i since 1940, to search their classified and unclassified records for forgotten radioactive hazards.

Brief explanation of the basis for the contention

Summary

It's unclear whether the Army didn't know, or didn't tell, that it used DU in Hawai'i. But it is clear that military information about military hazards in Hawai'i is unreliable.

Denial

The Army repeatedly denied use of DU in Hawai'i.

> "A memorandum from the Deputy Chief of Staff, Logistics, Munitions…determined that these types [DU] of munitions were never a part of the Army's inventory in Hawai'i and that the Army did not and does not have any plans to introduce depleted uranium to the State of Hawai'i." *[Stryker Final Environmental Impact Statement, May 2004, p. 3-83, attached]*

> "..we substantiate that the Army has not used, and does not plan to use, these [depleted] uranium rounds in Hawai'i." *[8-12-05 letter from Colonel James Boisselle, Army Chief of Staff, Schofield, to U.S. Senator Inouye of Hawai'i, attached]*
>
> [the Army has been] "repeatedly denying depleted uranium use here, most recently in the March 2005 draft environmental impact statement for Makua and at a public hearing for the Stryker brigade EIS in 2004." *[Schofield uranium find prompts calls for probe, Honolulu Advertiser, January 6, 2006]*
>
> "The Army has no information which would indicate that…depleted uranium munitions have ever been used in the Pohakuloa Training Area." [*10-4-06 letter from Army Lt. Col. Michael Webb to U.S. Representative Case of Hawai'i, attached]*

DU Discovery

Then an Army contractor found DU in 2005.

> "We have found much that we did not expect, including recent find of depleted uranium…" *[9-19-05 e-mail from Plyler McManus, Army Engineering and Support Center, to Ron Borne, Army Transformation, attached]*

Citizens found out from documents received by Earthjustice during litigation on a different issue. *[10-27-09 e-mail from David Henkin to Cory Harden, attached]*

Citizens, not the Army, first announced the find to the public. The Army says they were "confirming" the find. They don't say why confirmation only became ready for public announcement a few hours after the citizen announcement, and four months after the find.

> "Depleted uranium (DU) was found recently in the Wahiawa area, contrary to the Army's repeated denial of its use in Hawai'i." *[1-5-06 public statement by DMZ-Hawai'i/ Aloha Aina, attached]*
>
> "Schofield Barracks, Hawaii--In August 2005, 15 tail assemblies from spotting rounds made of D-38 uranium alloy, also called depleted uranium (DU), were recovered…" *[1-5-06 media release by U.S. Army Hawai'i, attached]*
>
> "The Army statement was issued several hours after a DMZ Hawai'i/Aloha 'Aina news conference announcing the e-mail findings…" *[Schofield uranium find prompts calls for probe, Honolulu Advertiser, 1-6-06, attached]*
>
> "Gardin [Stefanie Gardin, spokeswoman for the U.S. Army Garrison in Hawaii] said the Army wasn't intentionally withholding information about the use of depleted uranium. Training with the Davy Crockett system ended in 1968, and the classified nature of tests meant that a "minimal" number of people knew the system was being used in Hawaii." *[Depleted uranium confirmed, West Hawai'i Today, 8-22-07]*
>
> "After confirming the presence of DU, the Army disclosed that information to the public." *[Information Booklet, Depleted Uranium (DU) in Hawaii , by Army Installation Management Command-Pacific, issued about 11-07]*

Little evidence for claims of no other DU

Despite following the issue closely since January 2006, I have seen little evidence from the Army to back up its claims that other services have not used DU. I have not seen information about--

> (1) detailed searches of unclassified records for the Navy and Marines. *["DU Inventory in Hawai'i" page from Colonel Killian's handout to Hawai'i County Council, 2-3-09, attached]*
> (2) searches of unclassified records for the National Guard, Air Force, and foreign forces

(3) searches of classified records for non-Army and foreign forces

Below is all the information I have.

> "The Army queried and received responses from the other Services that they have not used DU at Pohakuloa." *[letter from Army to U.S. Rep. Mazie Hirono, dated about May 20, 2009, attached]*

> "**DU Inventory in Hawaii**
> --**Navy response:** "I have not found any evidence that the Navy ever had torpedoes with DU. We did accidentally fire less than 5 rounds of 25mm CIWS ammunition to a forested area in Hawaii (Oahu.) The incident occurred during maintenance of the phalanx. This incident was reported to the USNRC.
> --**Marine response:** I have also reviewed the Ordnance Technical Data Sheets in the back of the RIPRA to see if there is nay mention of DI as a component of any of the munitions expended on MCB Hawaii ranges. Again there were no findings of DU as a component of same. These documents reflect **known** range and munitions use of Marine Corps installations **up to 1999**. *[emphasis added]*
> TECOM Ammunition Section which manages training ammunition for all ground training throughout the Marine Corps has checked their records and they state that there has been no allocation of DU munitions for ground training. They also checked with aviation training and they said there is no allocation of DU used in aviation training as well.
> --**Air Force response:** Awaiting response." *[from handout from Colonel Killian's presentation to Hawai'i County Council, 2-3-09, attached]*

American Friends Service Committee in Honolulu reports no Army response to their 2007 Freedom of Information Act (FOIA) request for information on DU. *[10-27-09 e-mail from Kyle Kajihiro to Cory Harden, 10-11-07 and 10-12-07 FOIAs from American Friends Service Committee to the Army, attached]*

<u>License</u>
It's not even clear whether the Army once had a license for DU in Hawai'i, indicating the unreliability of military records.

> "…it is unclear whether there was any permit for the Davy Crockett spotting rounds." *[Airborne: the lowdown on depleted uranium in Hawai'i, Honolulu Weekly, 6-13-07]*

> "…the Army said recently declassified records indicate depleted uranium spotter rounds were used in Hawai'i between 1961 and 1968, and may have been licensed." *[Depleted uranium a Cold War leftover, Honolulu Advertiser, 5-11-07]*

> "Regarding your question when the Army was required to have an NRC license. I found out there are at least a half dozen licenses concerning the Army and DU. Licensed activity predates NRC back to the Atomic Energy Commission (AEC)." *[4-21-08 e-mail from Russ Takata, Hawai'i State Dept. of Health, to Jim Albertini, attached]*

> "The licensee [Department of the Army, Washington, D.C.] is…authorized to distribute spotting rounds to field units of the Army and to use such rounds for military purposes in accordance with the procedures described in the licensee's September 19, 1961 application. This license authorizes the export of spotting rounds containing uranium for military purposes." *[Source Material License SUB-459, issued to Department of the Army, Washington, D.C., by U.S. Atomic Energy Commission, 11-1-61, attached]*

> "The Army is planning to use depleted uranium in applications unrelated to its potential as a source material and has encountered administrative difficulties in complying with the special regulations governing its use…the present license does not permit transfer of projectiles to the field units which will employ them, nor does it permit expenditure of

> rounds in practice or combat. In addition, it does not provide for other uses of depleted uranium foreseen by the Army…While licensing may not be the best long-term solution, I recognize that…it offers the most expeditious solution to this urgent problem. Therefore, request that the existing license to the Chief of Ordnance be withdrawn, and that a new license be issued to the Department of the Army. This license should authorize possession of depleted uranium without quantity limitation and should permit fabrication, testing, export, issue to subordinate organizations, and expenditure of this material in uses other than production of U-235 or Pu-239." *[letter from Tyler Port, Acting Assistant Secretary of the Army, to U.S. Atomic Energy Commission, 9-19-61, attached]*
>
> "Depleted uranium will be used in projectile casings for ammunition and in other military applications…[physical form will be] As required by specific military application…Depleted uranium will be fabricated into military supply items, and these items will then be stored, distributed to subordinate military units, and utilized or expended in training or combat." *[Application for Source Material License from Department of Army, Washington, D.C., docketed 9-26-61,attached]*
>
> "Transmitted herewith, approved, is a request from the Ordnance Corps for an Atomic energy commission license to obtain depleted uranium. It should be noted that the proposed use of the material includes not only machining of barstock alloy at Lake City Arsenal but distribution of the assembled item to the Army Field Forces." *[letter from Lt. Col. Kraul to Atomic Energy Commission, 5-1-61, attached]*

Numbers of spotting rounds

Estimates of the number of spotting rounds range from about 700 statewide to over 2000 at Pohakuloa alone, again indicating the unreliability of past military records. See "Provide a brief explanation of the basis for the contention, *Re. ASR, [section] A.* " in my October 9, 2009 submission.

Other discoveries

Further indicating the unreliability of military information, numerous military hazards, some denied by military officials, have been found on Hawai'i Island.

The Army tested nerve gas in Waiakea Forest Reserve in 1966 and 1967 while publicly denying such testing. Defoliants were also tested in the area without notice to the County. *[see **FORGOTTEN HAZARDS,** Other discoveries, Waiakea, attachments]*

Old ordnance was found twice in 15 months at Hapuna, a popular public beach, some in water as shallow as 30 feet, some only about 100 yards from shore. *[see **FORGOTTEN HAZARDS,** Other discoveries, Hapuna, attachments]*

Students dug up a grenade in a school garden in the Waimea/ Waikoloa area, where old ordnance and explosive waste has been turning up for years, despite cleanup attempts. *[see **FORGOTTEN HAZARDS,** Other discoveries, Waimea/ Waikoloa, attachments]*

A recreational diver found the first of 300 pieces of unexploded ordnance in Hilo Bay. *[see **FORGOTTEN HAZARDS,** Other discoveries, Hilo Bay, attachments]*

Another diver found a 60-millimeter shell at a popular Hilo dive site, about 50 yards offshore in 12 feet of water. *[see **FORGOTTEN HAZARDS,** Other discoveries, Keaukaha, attachments]*

Old ordnance keeps turning up in many Hawai'i Island locations on land and offshore . *[see **FORGOTTEN HAZARDS,** Other discoveries, Multiple sites, attachments]*

FORGOTTEN HAZARDS ATTACHMENTS

DU Discovery

9-19-05 e-mail from Plyler McManus, Army Engineering and Support Center, to Ron Borne, Army Transformation
10-27-09 e-mail from David Henkin to Cory Harden
1-5-06 public statement by DMZ-Hawai'i/ Aloha Aina
1-5-06 media release by U.S. Army Hawai'I
Schofield uranium find prompts calls for probe, Honolulu Advertiser, 1-6-06

Denial
Stryker Final Environmental Impact Statement, May 2004, p. 3-83
8-12-05 letter from Colonel James Boisselle, Army Chief of Staff, Schofield, to U.S. Senator Inouye of Hawai'I
10-4-06 letter from Army Lt. Col. Michael Webb to U.S. Representative Case of Hawai'i

Little evidence for claims of no other DU
"DU Inventory in Hawai'I" page from Colonel Killian's handout to Hawai'i County Council, 2-3-09
5-20-09 *[approximate date]* letter from Army to U.S. Rep. Mazie Hirono
10-27-09 e-mail from Kyle Kajihiro to Cory Harden
10-11-07 FOIA from American Friends Service Committee to the Army
10-12-07 FOIA from American Friends Service Committee to the Army

License
4-21-08 e-mail from Russ Takata, Hawai'i State Dept. of Health, to Jim Albertini
Source Material License SUB-459, issued to Department of the Army, Washington, D.C., by U.S. Atomic Energy Commission, 11-1-61
Letter from Tyler Port, Acting Assistant Secretary of the Army, to U.S. Atomic Energy Commission, 9-9-61
Application for Source Material License from Department of Army, Washington, D.C., docketed 9-26-61
Letter from Lt. Col. Kraul to Atomic Energy Commission, 5-1-61

Other discoveries

Waiakea
"Big Island Leaders Strongly Protest Nerve Gas Tests Here" Hawai'i Tribune-Herald, 9-17-69
"Army Mum On Testing" Hawai'i Tribune-Herald, 9-17-69
"Future Tests Uncertain" Hawai'i Tribune-Herald, 9-18-69
"Pentagon Admits Four Isle Tests" Hawai'i Tribune-Herald, 9-18-69
"Community Entitled To Full Explanation" Hawai'i Tribune-Herald, 9-18-69
"Defoliants Tested, Too" Hawai'i Tribune-Herald 9-19-69
"Army Now Admits Gas Weapon Tests" Hawai'i Tribune-Herald 9-21-69
"An Apology Not Enough" Hawai'i Tribune-Herald 9-21-69
"No More Tests, Army Sec Says" Hawai'i Tribune-Herald 9-21-69

Hapuna
"Ordnance found at Hapuna" West Hawai'i Today, 7-31-97
"More ordnance found at Hapuna" Hawai'i Tribune-Herald, 10-14-98

Waimea/ Waikoloa
"Hunt is on for military ordnance" Hawai'i Tribune-Herald, 9-15-97
"Students dig up grenade" Hawai'i Tribune-Herald, 2-6-02

Hilo Bay
"Ordnance disposal falls short" Honolulu Advertiser, 9-17-00
"Navy blasts hundreds of shells in bay; scores remain" Hawai'i Tribune-Herald, 9-19-00

Keaukaha

"Man finds WW II mortar round at Keaukaha beach" Hawai'i Tribune-Herald, 1-31-09

Multiple sites
"War artifacts pose danger to islands" Honolulu Advertiser 7-13-97
"A lesson in ordnance: Look, but don't touch" Hawai'i Tribune-Herald, 9-15-97
"Another mortar round found" West Hawai'i Today, 6-30-98
"Blasts from the past lie on Parker Ranch" Hawai'i Tribune-Herald, 5-25-03
"Military ordnance creating hazard" Hawai'i Tribune-Herald, 7-30-09

LEASE

Introduction

It may be a violation of the State Department of Land and Natural Resources (DLNR) lease to store radioactive material out in the open at Pohakuloa.

Brief explanation of the basis for the contention

The land is "to be used for the following purpose: Military purposes." *[State General Lease No. S-3849 for Pohakuloa, 8-17-64, attached]*

"Every lease issued by the board of land and natural resources shall contain…Where applicable, prevention of nuisance and waste…" *[Hawai'i Revised Statutes (HRS) 171-35, attached]*

LEASE ATTACHMENTS

State General Lease No. S-3849 for Pohakuloa, 8-17-64
HRS 171-35

AIR MONITORING ATTACHMENT
9-25-09 e-mail from Dr. Reimer to Cory Harden (excerpts, copied by Cory from printout)

Right now, my criticism of the Army air monitoring program is that it is not looking for DU and it is unknown how much uranium they obtain through collection is DU. They feel comfortable indicating that the total uranium is so low it does not matter whether it is DU or natural U. In fact, they don't want to even determine health risks for the Big Island. Their program is based on protocols...I happen to think I can justify they are the wrong protocols....

we do know the World Health Organization model applied to airborne uranium is probably not the one to guide the determination [of health risk]. Did it ever catch your attention that the [Army] reports on airborne U concentration state they follow the WHO guidelines on soluble uranium? DU and DU oxides are not soluble (have a low solubility). I think WHO groups the two anyhow. Also, ASTDR (agency for toxic substances and disease registry) looks at chronic exposures and uses soluble uranium as a guide. When entrained in your body, the soluble U has a more rapid clearance time and is considered less of a health risk. The DU alloy and oxide form is ignored.

And what about the form of the uranium? It is an alloy and a study by the U.S. Air Force revealed that various DU alloys, not quite the same as claimed to have been used at Pohakuloa, are 100 percent effective in producing tumors I mice that then metatasize the lungs. Solid (or alloyed) U as a respirable adsorbed particle in your lung will produce a radiation dose much greater than the same size particle of oceanic basaltic rock containing 0.5 part per million uranium. Granted it is less than you might get from plutonium, but it does not necessarily conform to ALARA.

The most probable exposure vector for the residents of the Big Island is the inhalation of respirable (a size determination) aerosols. As long as the bombs drop and the winds blow in the spotting round test area, there will be the aerosol production and transport of DU. The aerosols may form and drop nearby but they can become remobilized with constant bombing.

…I must note that I had asked for *[illegible on printout]* changes in sampling protocols and few were made. For example, I asked that the sampling cover a longer period or the pumping rate be increased. That was done for the July 2009 sampling by the [Army] contractor, Dr. James Morrow. It was increased by a factor of 3 and still did not get uranium isotopes 2234 and 235 reporting values into measurable ranges. A factor of 10 to 100 fold increase in sample might, or alpha spectrometry might see the difference….

AIR MONITORING ATTACHMENT
10-12-09 e-mail from Dr. Reimer to Cory Harden (excerpt, copied by Cory from printout)

Right now the Army air sampling is not getting enough sample to detect DU from the natural U. Part of that is the sample size is too small.

AIR MONITORING ATTACHMENT
10-27-09 5:05 PM e-mail from Dr. Reimer to Cory Harden (excerpts)

…NRC has to know the sampling is inadequate… I have given further though *[sic]* to what should be done for sampling and I feel a group of people getting together and discussing what could be included is a good way. Another is in the RFP process - ask the proposers what they would do in their monitoring programs rather than specify what is to be done… I felt that the contractor for the Army, Jim Morrow, was extremely knowledgeable about DU and sampling methods. He is limited by the specifications of the contract… It is claimed that the DU used here was molybdenum alloy. I have not seen studies with that as an alloy component. Jim Morrow suggested to me that the found munition rounds should be analyzed to determine the actual metal alloy content. That is easily done.

AIR MONITORING ATTACHMENT
9-22-09 e-mail from Lorrin Pang to Jim Albertini (excerpts, copied by Cory Harden from printout)

UH [University of Hawai'i] , DOH [Hawai'i State Department of Health] et al will argue for very complicated expensive machinery to detect minutia. If they were sincere and if we had the budget that would be fine--BUT they want to sacrifice comprehensive sampling for a very complex test. That is wrong in light of what we already know--that the girl scout [Kilohana Girl Scout camp, near Pohakuloa] counts of 4 elevated cpm of 500 minutes vs. zero of 20.000 in Kona is significant. The best analogy is if I tried to detected [sic] diabetes by measuring only a few minutes with a very very sensitive test versus scores of minutes throughout the day with a simpler test.
In my response to NRC DOH tries to make a survey more sensitive by only considering fancy machinery--they do not seem to appreciate or understand that increased sampling number and sites also makes the survey more sensitive--especially when the target is not homogenous in place and time.

AIR MONITORING ATTACHMENT
Dr. Reimer's resume

Curriculum Vita
G. Michael Reimer, Ph.D., Geologist
Consultant and Advisor

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G. Michael Reimer received a B.A. in Science Education from Alfred University, Alfred, NY in 1967 and his Ph.D. in Geology from the University of Pennsylvania, Philadelphia, PA in 1972. He was selected as a National Academy of Science/National Research Council postdoctoral fellow at the U.S. National Bureau of Standards (now National Institute of Standards and Technology) from 1972 to 1974 in the Nuclear Analytical Chemistry Section. He co-developed standards for trace metal analysis in glass and established quality control/quality assurance guidelines for use of the standards.
In 1974, he joined the U.S. Geological Survey as a Research Geologist where he pioneered the development of mobile high-resolution analytical equipment and soil-gas sampling methods for energy resource exploration including uranium, oil and gas, and geothermal. He has investigated the application of these techniques to hazard prediction regarding earthquakes and volcanoes. He established a gas monitoring station at Kilauea Volcano in 1981 and determined that the release of carbon dioxide from the summit during periods of quiescence were as great as during eruptive episodes. Dr. Reimer was the Director of the Gas Geochemical Laboratory at the U.S. Geological Survey, focusing on environmental studies and risk mapping. He served as chief of the Radon Studies Project within the USGS, and developed techniques to provide a refined radon risk map for the U.S. on a county-level scale by establishing ground-truth measurements for estimating the radon potential of the soils. He was Principal Investigator on several radon projects funded through interagency agreements and served as Radon Principal Scientist with the U.S. Department of Energy and has received numerous awards and honors for his pioneering work. He wrote the EPA chapter on Hawaii for its national Radon Risk Guide. From 1991 to 2006, he established and chaired the environmental radioactivity section for the special meetings of Methods and Applications of Radioanalytical Chemistry for the American Nuclear Society. In addition to his scientific duties, he has supervised upward mobility opportunity programs and developed guidelines for retraining and outreach activities.
Dr. Reimer was appointed Research Professor and Director of the Institute for Resource and Environmental Geosciences at the Colorado School of Mines in 1998. He has sponsored and advised students participating with him through research grants. He was a founding member of the CSM Diversity Committee and he chaired the CSM Geochemistry Graduate School Program. He has participated in various international studies including using gases to delineate seismic-induced faults at volcanoes in Italy, radon risk mapping in Ireland, radiation-site contamination evaluations in Eastern Europe, and environmental applications using gas tracers to determine pathways for toxic material transport including the proposed Yucca Mountain High Level Waste

Repository. He has applied the gas sampling techniques he had developed to defining the release of methane from coal as it relates to loss of resource and creating potential hazards for nearby urban development. He participated as an international expert with the International Atomic Energy Agency in reviewing and cataloging worldwide radioelement mapping. Currently he participates in independent research attempting to establish a theoretical base for the transport of elemental and particulate matter in the natural environment. He is a member of the Geological Society of America and the American Geophysical Union.
He has served as guest editor for Geophysical Research Letters and the Journal of Radioanalytical and Nuclear Chemistry. He has authored or coauthored over 100 peer reviewed scientific publications and over 50 abstracts with presentations at national and international symposia. He has consulted for Oil and Gas companies and provided technical expertise for modifying gas analytical equipment for specific tasks. He also was a Senior Advisor to the independent ES^2P^2AR Group concerned with the ethical use of science in support of public policy and regulation.
Dr. Reimer retired from the Colorado School of Mines and moved to Hawaii. He now works part time as a private consultant and advisor to several different companies.

AIR MONITORING ATTACHMENT
Dr. Pang's resume

May 2007

CURRICULUM VITAE

Name: Lorrin Wayie Pang

Military Rank: LtColonel, Medical Corp (Retired)
Walter Reed Army Institute of Research

(PII INFORMATION REMOVED)

Education/Training: 1971-75 Princeton University, BS
Chemistry, Cum Laude

1975-79 Tulane Medical School, MD

1976-79 Tulane School of Public Health
MPH in Tropical Medicine

1979-80 Federal University of Brazil;
Recife, Pernambuco, Post Graduate
Studies in Pathology and Infectious
Diseases

1980-81 Letterman Army Hospital, San
Francisco, CA, Medicine Intern

1981-82 Walter Reed Army Institute of
Research, Washington DC, Preventive
Medicine Residency

Positions Held: 1982-87 Epidemiologist, AFRIMS (Walter Reed
Inst. Overseas Laboratory) Bangkok,
Thailand

1987-90 Chief, Preventive Medicine Service,
Tripler Army Medical Center,
Honolulu, Hawaii

1987-89 Clinical Associate Professor,
School of Public Health,
University of Hawaii

1990-92 Medical Officer, Malaria Unit,
World Health Organization, Geneva,
Switzerland.

1992-97 Clinician/Epidemiologist,
Walter Reed Institute of Research
Overseas Laboratory, Brazil.

1994-5 Adviser to Pan American Health
Organization (Meningitis Vaccine)

1985-Present Adviser to World Health
Organization (Tropical Disease
Research Unit: Chagas Disease,
Leishmaniasis, Malaria, Clinical
Trials)

1997-2000 Chief, Department of Bacteriology
and Molecular Genetics, AFRIMS,
Walter Reed Institute of Research
Overseas Laboratory, Bangkok, Thailand.

1997-2000 Faculty of Tropical Medicine,
Mahidol University, Bangkok, Thailand.

2000-present District Health Officer, Maui County
State of Hawaii

2001-present Independent Advisor Glaxo Smith Kline Pharmaceutical

Awards: Army Achievement Medal, 1982, 1996.
Army Research and Development Medal, 1987.
Army Meritorious Service Medal, 1990, 1997.
Selected as on of Hawaii's top (3%) physicians for 2006-7.
Selected as on of the Nations top (3%) physicians for 2006-7.

Selected one of 10 Citizens of Hawaii who "Made a Difference" in 2001 for eradication of Dengue on Maui, Hawaii

2002 Discovery Channel documentary on Dengue outbreak and eradication in Maui
2006-7 Selected as one of Hawaii's top (3%) physicians
2006-7 & 2007-8 Selected to America's Best Doctors List (3% of physicians)

Certification: Medical License State of Louisiana, 1980- 2000.
Hawaii State License, 2000-present
Board Certification in Preventive Medicine, 1990.

Featured on Discovery Health Documentary 2002 for Eradication of Dengue on Maui, Hawaii

Publications (chronologically out of order):

1. Lemon SM, Miller RN, Pang LW, Prier RE, Bernard KW. Failure to achieve predicted antibody responses with intradermal and intramuscular human diploid cell rabies vaccine. Lancet 1984;19:1098-1100.

2. Webster HK, Boudreau EF, Childs GE, Yongvanitchit, Pang LW. Antimalarial drug susceptibility testing of *P. falciparum* in Thailand using a microdilution radiosotope method. Am J Trop Med Hyg 1985;34(2):228-35.

3. Pang LW, Boudreau EF, Childs GE, Webster HK, Supernantalerk C, Somutsakorn P. The failure of large dose erythromycin in combination with standard doses of chloroquine or quinine to treat human falciparum malaria. Bull WHO 1985;63(4):739-43.

4. Tan SG, Green CA, Andre RG, Baimai V, Pang LW. Genetics of esterases and 6 phosphogluconate dehydrogenase in the anopheles maculatus complex. Acta Tropica 1986;43:113-23.

5. Childs GE, Pang LW, Wimonwattrawatee T, Pooyindee N, Nanakorn A, Limchitee S, Webster HK. *In vitro* mefloquine resistance of *Plasmodium falciparum* isolated from the Burmese border region of Thailand. SEA J Trop Med Publ Hlth 1987;18(4):438-43.

6. Boudreau EF, Pang LW, Chaikummao S, Witayraut C, Thiemanum W, Pookasorn M. Comparison of mefloquine, choroquine plus fansidar and chloroquine alone as malarial prophylaxis in eastern Thailand. SEA J Trop Med Publ Hlth 1991;22:183-9.

7. Pang LW, Limsomwong N, Boudreau EF, Singharaj P. Doxycycline prophylaxis for falciparum malaria. Lancet 1987;23:1161-4.

8. Boudreau EF, Pang LW, Dixon KE, Webster HK, Pavanand K, Tosingha L, Somutsakorn P, Canfield C. Treatment efficacy of halofantrine (WR171,669) in initial field trials in Thailand. Bull WHO 1988;66(2):227-35.

9. Limsomwong N, Pang LW, Singharaj P. Malaria prophylazis with proguanil in children living in a malaria endemic area. Am J Trop Med Hyg 1988;38(2):231-6.

10. Pang LW, Limsomwong N, Singharaj P. Falciparum and vivax malaria prophylaxis with low dose doxycycline. J Infect Dis 1988;158(5):1124-7.

11. Pang LW, Limsomwong N, Webster HK, Karwacki JJ. Circumsporozoite antibodies and falciparum malaria incidence in children living in a malaria endemic area. Bull WHO 1988;66(3):359-63.

12. Webster HK, Boudreau EF, Pang LW, Permpanich B, Sookto P, Wirtz RA. Development of immunity in natural *Plasmodium falciparum* malaria antibodies to the falciparum sporozoite vaccine 1 antigen (R32tet32). J Clin Microbiol 1987;25(6):1002-8.

13. Harbach RE, Gingrich JB, Pang LW. Some entomological observations on malaria transmission in a remote village in northwestern Thailand. J Am Mos Contr Assn 1987;3(2):296-301.

14. Pang LW. Doxycycline prophylaxis for malaria (letter). Lancet 1987;24:970.

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Treatment of Falciparum Malaria with Proguanil + sulf in the Brazilian Amazon. Published, SEAJTM

The Efficacy of Hepatitis B vaccinations in HIV Infected adults. In Press, Vaccine

Dengue in Hawaii 2001-2001, In Press EID.

CHARACTERIZATION REPORT ATTACHMENT
10-1-09 e-mail from Dr. Reimer to Cory Harden
From: <geomike5@att.net>
To: <mh@interpac.net>
Sent: Thursday, October 01, 2009 11:49 PM
Subject: characterization
> Hi Cory,
> > That is a difficult question to answer. We are talking about the same report, the July 24, 2009 one issued by Cabrera.>
> I never considered it to be any more than claimed by the title and introduction. It is a FINAL technical memorandum. The introduction states: "This technical memorandum has been prepared to present the findings of the aerial surveys conducted at PTA from October 28, 2008 through December 12, 2008.">
> Unless the Army has some definition of characterization that this report fits, I considered it as it was titled when I read it. The Army should share their criterion with us.>
> If you read the description under the Army web site, you will see that the final technical report reads the same of PTA as it does for Makua. Similarly for these sibling reports, there are other oversights. In the Makua technical memorandum, the text refers to figures 4-4 and 4-5 showing oxidized parts of DU spotter rounds. Both photographs are labeled photo 4-5. The same two photos appear in the PTA final technical memorandum labeled as 4-9 and 4-10 but are not referenced in the text as far as I noticed. One might reasonably ask if these parts are form Makua or PTA or are they simply staged photos for illustrative purposes? >
> Mike Reimer
> GeoMike5@att.

CHARACTERIZATION REPORT ATTACHMENT
10-27-09 6:08 PM e-mail from Dr. Reimer to Cory Harden
From: GeoMike5@att.net
To: mh@interpac.net
Sent: Tuesday, October 27, 2009 6:08 PM
Subject: technical report to final characterization
Hi Cory,
Here is probably the best source of comment I have on the technical reports being over interpreted. It comes from my comments to NRC. The suggestion that DU has been already removed is totally without merit and is an example of the failure to provide adequate review of these reports. Mike

Shortcomings of using conclusions of scoping reports:
The periodic reports submitted and released by the U.S. Army are fraught with numerous shortcomings that indicate they should have maintained a data presentation format rather than make an attempt at interpretation. As these reports can guide future response and activity and even policy or regulation, it is important to present an example of over interpretation. NRC is staffed with very experienced and skillful individuals and they are fully capable of seeing these shortcomings. Therefore it is not necessary to dwell upon minor oversights that should have been addressed in a company internal review.
The report used for this demonstration is the July 24, 2009, FINAL Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys, The Big Island (Hawaii), Hawaii, Contract number W521J-07-D0041, Delivery Order 0003, Cabrera Project Number: 08-3040.03
The report makes a comment that from the soil sampling done at PTA, there is no evidence that DU is present. This is based upon isotopic analysis of uranium and that the

signature is not consistent with that of DU.
Insufficient information is provided to state that conclusion and the data provided do, in fact support the alternative conclusion. The results of a 2007 soil analysis is presented in Table 2-1 and the location of the nine samples are referenced to Table 2-3. There is no table 2-3 but the locations do appear on Figure 2-2. Table 2-1 lists the activity for uranium isotopes. The soil samples were collected in areas where sediment had or may have collected from past runoff or erosion. That seems to indicate it could be a time integrated sample with several or multiple sources along the lines of flow contributing to the sediment accumulation. The text on page 2-3 states “None of the results indicate uranium depletion, where the 234-U activity concentration is significantly lower than the238-U activity concentration.”
Although it might be useful to define “significantly lower,” the amount as presented by the IAEA in a question and answer information sheet should suffice to indicate this magnitude. http://www.iaea.org/NewsCenter/Features/DU/du_qaa.shtml
The activity ratio of natural uranium 234/238 is 1, suggesting secular equilibrium. The activity ratio of depleted uranium 234/238 is 1:5.5, a lower value, and up to the reader to determine degree of significance.
Of the 9 samples listed in Table 4-1, three have activities of 234-U below that of 238-U. Sample 4011 is 25 percent lower. A reasonable challenge to the “no DU” statement can be made based on the analytical results and the method of sample collecting. As the sample could be integrated over time and derived from several locations, it is very likely a mixture of natural and DU contaminated soils. Thus, DU is not only present but it is mobile!
One additional point can be made. The report states (page 2-3) “The visual and scanning surveys identified no distinct surface areas with yellow, oxidized DU metal fragments.” Yet the figure Photo 4-1 (page 4-7) clearly shows a partial metal DU fragment of a spotting round with yellow coloration on its surface. Later (page 4-8), the report states that only very minor oxidation is present, but again the subjective characterization is open to interpretation. Regardless, there is oxidation present and the oxidized form is readily converted to aerosols and thus available for migration.
Finally, a conclusion is suggested in this report that is totally without merit. That conclusion is that because there is so little DU found at PTA, it has already been removed.
On page 5-2 there is the statement:
“The number of DU spotter round bodies, aluminum fin assemblies and DU fragments are much fewer than would be expected given the total number of pistons which were identified. This fact, and in comparison to the number of DU fragments and portions of the Davy Crockett spotter rounds found at Schofield Barracks, suggests that some type of range clearance may have occurred at PTA.”
The distillation of this section is that conclusions contained in the technical data reports are out of place and often incomplete characterizations of the full data sets. Past information should be considered as it was originally intended, scoping surveys. The NRC license must provide direction of relevant monitoring procedures and not be based upon any erroneous or misstated conclusions of the data reports.
We have the ingrained public fear of radiation, the complexities of radiation measurement, the emerging science of DU and the health effects; and all this is complicated by the internet. For pure science, internet opinion is too often received as scientific gospel and peer review is long forgotten as a means of providing credibility. It may not take many iterations of this suggestion in the final report before it too becomes “public” fact.

CHARACTERIZATION REPORT ATTACHMENT
7-24-09 Comments on Cabrera Services report "Final Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys The Big Island (Hawaii) Hawaii" by Dr. Marshall Blann
Comments on Cabrera Services report "Final Technical Memorandum for

Pohakuloa Training Area (PTA) Aerial Surveys The Big Island (Hawaii) Hawaii"
July 24,2009

This report primarily summarizes on an air mapping of the Pahakuloa Training Area to search for DU, and oxides of Uranium which may have resulted from DU on the range. I would like to analyze the sensitivity/adequacy of the methods used. Before getting to those calculations, I would make comments on the technique used, and on the data for alpha spectrometry presented in the report.

Data collection:

A set of 4 NaI detectors were used under a helicopter flying at 3-4 meters altitude.It was noted on p 4-15 of the report that flight restrictions were required " due to the presence of lightweight debris (plywood, aluminum scrap, aluminum target, and munitions debris) which could become airborne due to helicopter rotor wash. Volcanic dust limited the minimum altitude in places throughout the range". It seems reasonable to assume that the Uranium oxide dust, a contaminant critical to measure, would likewise be blown away by the same rotor wash before it could be measured. Thus the technique used in search of uranium oxide begins by potentially blowing it away. Not finding significant levels may be a self fulfilled, predetermined result due to methodology.

Alpha spectrometric results:

Table 4-1 gives results for soil sample analyses by alpha spectrometry, on p. 4-1 " by a NELAP accredited laboratory using method ATSM-D3972."

I assume that this meant to be "ASTM-D3972", which is a protocol for testing water samples for U. Water samples differ from soil samples, especially if trace alpha emitters are the focus. The protocol cited is not valid. How was a weightless sample obtained for the alpha spectroscopy? The soil sample would have to be completely dissolved. Before running through an anion exchange column to get the U fraction, how was the bulk of silicon etc. removed? If by precipitation, then likely trace radioactivities were co-precipitated and lost to the sample. My point is, that there is a lot of chemistry to be done before being able to do meaningful alpha spectrometry on a soil sample; citing an inapplicable protocol leaves me with no confidence in the table presented. "Trust me" is not an acceptable basis for a scientific report.

Results of aerial survey:

Is the methodology appropriate to the task? In flyover radiation counting, 4- 4 liter volume Tl activated NaI detectors were used to gather gamma spectra, looking for 766 and 1001 keV photons emitted by 234mPa decay.To evaluate sensitivity, we need to know the branching ratios for the gammas observed, the photopeak efficiencies of the crystals for those gamma energies, and the detector solid angle. Tthe 1001 keV gamma has a branching ratio (abundance per decay) of just 0.8% (0.008)[NIM in PhysicsResearch, A424(1999)425-443], and the 766.36 keV gamma has a branch of 0.294, with a transition at 781.37 (0.00778 branch) which would be non-resolvable from the 766 using the NaI crystals of this measurement. I do note a discrepancy in branching ratio for the 1001. KeV photon with a branch of 0.837 in the Nuclear Data Table result, vs. the 0.0083 of the published research paper. The latter result seems accepted in other works- but this point needs further scrutiny. If the published paper cited is correct, Cabrera was seeking a phantom.

Solid angles: The altitudes cited were of 3-4 meters height. NaI detectors are usually right circular cylinders with PM tube mounted at the top of the cylinder with suitable reflector/light pipe. Resolution is poor for these detectors (e.g. vs. (HP)Ge), and the photoefficiency for the 2 gammas of interest is not cited- a guess might be around 0.4 (40%). Lacking the data on detector geometry, we might generously assume a cubic 4 liter crystal, so that one face would be 252cm**2. At 3 meters height, the area of a sphere would be 1.13x10**6 cm**2 (1.13 million square centimeters), so the solid angle of one NaI detector would be 2.2*10**(-4) . At 4 meters altitude the solid angle would be reduced to 1.25*10**(-4).

Count rates required for detection: The report states that the detector system travelled at 2-3

m/sec, with countsbeing taken at 1 second intervals. My own guess is that a minimum of 50 counts of either gamma would be required to resolve the appearance of a possible peak rising above the Compton scatter plus cosmic ray background. Trying to concentrate analyses of these gammas on just' regions of interest', without a proper unfolding of photo/Compton responses, beginning at the highest energies and working down, or by simultaneous least square fitting, is to my opinion asking for questionable results.

If the solid angle is 2.2*10**(-4), the BR(branching ratio) is 0.294, and the photopeak efficiency of the detector is 0.4, the number of dps necessary averaged over the 2-3 meters travelled, will be (50 counts detected)/[(0.4 photopeak efficiency)*(0.00022solid angle)*(BR=0.26 or 0.008)= 1.7*10**6 or 5.5*10**7 Pa234 dps. Since there is transient equilibrium with 238U, 234Th and 234Pa- and 234U, the actual dps implied will be triple these numbers. If the altitude during sampling were 4 m, these numbers would all be approximately doubled due to reduced solid angle. I have not divided by 4 due to use of 4 detectors, because I believe that each will require the 50 counts to be able to separate peak from background. If better detail had been given in the report, this point could be based more on fact than experience. From this exercise I deduce that the gamma ray measurements would only yield positive detector response if the average ground radiation levels were 4.5 milliCuries for the 1001 keV gamma, or nearer 0.15 milliCuries for the 766 keV gamma.

These levels are the noise levels below which I believe definite, reliable 'signals' would not be received by the apparatus used. The gear apparently had no anti-coincidence shielding, nor was discussion given of any attenuation between 'sample' and detector. I do not feel that this lower level of radiation gives confidence in the safety of the facility for personnel working there, nor does it address the question of possible migration of oxides offsite over the past 40 years. A more sensitive assay of ground radiation should be undertaken.

Marshall Blann, Kailua- Kona, Hi.

CHARACTERIZATION REPORT ATTACHMENT
*Dr. Reimer's resume--see **AIR MONITORING ATTACHMENTS***

CHARACTERIZATION REPORT ATTACHMENT
Dr. Blann's resume [first 3 pages only; all 31 pages available on request]
To be mailed

FORGOTTEN HAZARDS ATTACHMENT DU Discovery
9-19-05 e-mail from Plyler McManus, Army Engineering and Support Center, to Ron Borne, Army Transformation
To be mailed

FORGOTTEN HAZARDS ATTACHMENT DU Discovery
10-27-09 e-mail from David Henkin to Cory Harden

From: David Henkin
To: 'Cory (Martha) Harden'
Sent: Tuesday, October 27, 2009 6:24 PM
Subject: RE: DU

Cory,

My memory is that we were the first non-governmental entity to learn about the DU discovery, that I received the information in documents received in the course of litigation (not a FOIA), and that I then shared that information with various citizen groups.

Aloha, David

_____

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FORGOTTEN HAZARDS ATTACHMENT DU Discovery
1-5-06 public statement by DMZ-Hawai'i/ Aloha Aina
January 5, 2006
PUBLIC STATEMENT ON DEPLETED URANIUM
Depleted uranium (DU) was found recently in the Wahiawa area, contrary to the Army's repeated denial of its use in Hawai'i. Depleted uranium (DU) is made from nuclear waste and is a radioactive and highly toxic substance. There are growing concerns about the health hazards of DU, including the mounting evidence that DU is one of the factors contributing to Gulf War Syndrome.
An email between Army officials dated September 19, 2005 pertaining to unexploded ordnance removal for the Stryker Brigade expansion [enclosed] states "we have found much that we did not expect, including recent find of depleted uranium." Up to this point, the military has denied any use of depleted uranium in Hawaii. The email goes on to describe the site as a CWM (Chemical Warfare Materiel) site where "the danger is just too high" to use mechanical sifters. These recent revelations, then, indicate that the Army is either unaware of its DU and chemical weapons use, or has intentionally misled the public. Both possibilities are deeply troubling.
The military has maintained a pattern of secret testing of dangerous materials on Hawaii's land and people for decades, including sarin nerve gas testing in the 1960s, dumping of 8,000 tons of chemical weapons offshore of Waianae, and Agent Orange tests on Kauai. This is the latest in a history of lethal secrecy. We are concerned about what other dangerous activities are affecting our families, which will only be disclosed to us in decades to come. Secret military testing, exercises, and research are unacceptable. We will not allow our ohana and aina to be used as test subjects in a futile quest for global hegemony. Rather than expose our families to the inevitable risk that comes with mixing dangerous toxins with our fragile, intertwined environment, it is far wiser and prudent that we adopt the principle of precaution, and remove and prevent those things which may, in all likelihood, be harmful.
This revelation on DU use in our homeland comes in the midst of a proposal to increase secret military activities through a research facility at the University of Hawaii, a planned land grab for a Stryker brigade, and renewed live-fire training at Makua. Military expansion must cease, to protect our communities from new dangers, and existing areas should be immediately cleaned and returned. We are demanding full disclosure by the Army about its training and muntions recovery activities in Hawai'i, the immediate clean up of contaminated areas, and health care for potentially affected communities, including military personnel and their families. We are filing a Freedom of Information Act request today for additional information about DU in the Hawaiian islands. The life of the land and the people must be upheld. Ua mau ke ea o ka aina i ka pono.

FORGOTTEN HAZARDS ATTACHMENT DU Discovery
1-5-06 media release by U.S. Army Hawai'I
Media Release
25th Infantry Division &
U.S. Army,Hawaii
America's Pacific Division

FOR IMMEDIATE RELEASE
Release # 2006-01-01
January 5, 2006

Depleted Uranium Found on Schofield
SCHOFIELD BARRACKS, Hawaii -- In August 2005, 15 tail assemblies from spotting rounds made of D-38 uranium alloy, also called depleted uranium (DU), were recovered by a contractor clearing a range impact area of unexploded ordnance and scrap metal.
Tail assemblies were recovered by Zapata Engineering, the contractor conducting the range clearance operation. U.S. Army Garrison Hawaii officials confirmed that the items have low level radioactivity and represent no danger.
The recovered items are approximately four inches in length and an inch in diameter.

The tail assemblies are sub-component remnants from training rounds associated with an obsolete weapon system which was on Oahu in the 1960s.
The Agency for Toxic Substances and Disease Registry of the U.S. Department of Health and Human Services stated in its Toxicological Profile for Uranium, "[n]o human cancer of any type has ever been seen as a result of exposure to natural or depleted uranium."
In addition, a 1999 RAND study concluded, "there are no peer-reviewed published reports of detectable increases of cancer or other negative health effects from radiation exposure to inhaled or ingested natural uranium at levels far exceeding those likely in the Gulf."
The DU was used in the spotting rounds because of its high density and weight. The DU was not intended to increase the kinetic energy of the round as is the case of the armor piercing rounds for the Abrams tank and the Bradley fighting vehicle.
Other than the armor piercing rounds for the Abrams and Bradley, there are no other weapons in the current U.S. Army inventory that use Depleted Uranium. Furthermore, there is no record of the Abrams and Bradley DU rounds ever being stockpiled in Hawaii or being fired on Army ranges in Hawaii.
All fifteen items are triple bagged, stored in a metal container, segregated, and secured pending disposition instructions from the responsible Army agency.
After the recovery, Zapata Engineering added radiological screening to their procedures for the screening the scrap metal recovered from the range.
The unexploded ordnance and scrap metal cleanup being performed by Zapata is in preparation for the construction of a new Battle Area Complex on Schofield Barracks where Stryker Soldiers will practice dismounted maneuvers, mounted 50-caliber machine gun and MK-19 grenade launcher firing, and, eventually, a 105mm Stryker mobile gun system.

- more -

FOUND 2-2-2
The cleanup area has been an ammunition impact area for decades. Because the training area is being expanded, the unexploded ordnance removal is both necessary and consistent with the Army's commitment to the environment.
"The recovery of these items demonstrates the importance of the range clearing project and the Army's commitment to being a good environmental steward," said Col. Howard Killian, commander, U.S. Army Garrison Hawaii. "These assemblies had been in the impact area for decades. Now they are secured and will be disposed of in the proper manner. Although they did not pose any environmental threat, it is better that we have removed them.
"The Army has never intentionally misled the public concerning the presence of DU on Army installations in Hawaii. This is an isolated incident and should not be considered as an attempt to misinform the public," Killian concluded.

-30-

(MEDIA NOTE: For more information, contact.Kendrick Washington or Stefanie Gardin at 808-655-4815/8729 or cell 808-497-7336

FORGOTTEN HAZARDS ATTACHMENT DU Discovery
Schofield uranium find prompts calls for probe, Honolulu Advertiser, 1-6-06
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Denial
Stryker Final Environmental Impact Statement, May 2004, p. 3-83
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Denial
8-12-05 letter from Colonel James Boisselle, Army Chief of Staff, Schofield, to U.S. Senator Inouye of Hawai'i
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Denial
10-4-06 letter from Army Lt. Col. Michael Webb to U.S. Representative Case of Hawai'i
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Little evidence…
"DU Inventory in Hawai'I" page from Colonel Killian's handout to Hawai'i County Council, 2-3-09
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Little evidence…
5-20-09 *[approximate date]* letter from Army to U.S. Rep. Mazie Hirono
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Little evidence…
10-27-09 e-mail from Kyle Kajihiro to Cory Harden

----- Original Message -----
From: keboi
To: Cory (Martha) Harden
Sent: Tuesday, October 27, 2009 6:25 PM
Subject: Re: DU FOIA
Hi Cory
I sent those in 2007, see attached. I have gotten nothgin from the Army. They don't even return my calls. Thanks.
Kyle

In a message dated 10/27/09 12:48:18 Hawaiian Standard Time, mh@interpac.net writes:
Kyle, for my NRC filing...did you get any reponse to your FOIA re all DU in Hawai'i? Was it 2005? 2006? Just to the Army, or all military? If you can easily send a copy, that would be great. thx, Cory

FORGOTTEN HAZARDS ATTACHMENT Little evidence…
10-11-07 FOIA from American Friends Service Committee to the Army

October 11, 2007

Commander, U.S. Army Garrison Hawai'i
Attn: Freedom of Information Officer Anna Tarrant
Schofield Barracks, Hawai'i 96857
Annajean.tarrant@us.army.mil
808-656-6288

Subject: FOIA Request related to ordnance removal at Army ranges in Hawai'i

Dear Ms. Tarrant

Pursuant to the Freedom Of Information Act (FOIA) 5 U.S.C. § 552, and all amendments thereto, I hereby request the following information:

1. Any and all information, records, documents, logs, reports and inventories of unexploded, inert and/or spent munitions and munitions fragments found, identified, removed and/or disposed of from Schofield Barracks, Makua Military Reservation, Pohakuloa Training Area, and other Army training areas in Hawai'i since the year 2000.
2. Please include information that specifies the quantity, name, identification number, type, size, weight, and description of the munitions, the precise locations where they were found, including any GPS coordinates if available, and a description of how the munitions were handled and finally disposed of. Please include any and all maps, logs, photographs and/or

videotapes documenting munitions removal activities.

If all or any part of this request is denied, I request that I be provided with a written statement that lists the documents withheld from disclosure and the grounds for the denial. If you determine that some portions of the requested records are exempt from disclosure, please provide me with the portions that can be disclosed.

Thank you very much.

Sincerely,

Kyle Kajihiro

FORGOTTEN HAZARDS ATTACHMENT Little evidence…
10-12-07 FOIA from American Friends Service Committee to the Army

October 12, 2007

Commander, U.S. Army Garrison Hawai'i
Attn: Freedom of Information Officer Anna Tarrant
Schofield Barracks, Hawai'i 96857
Annajean.tarrant@us.army.mil
808-656-6288

Subject: FOIA Request related to Depleted Uranium, Chemical Munitions and Davey Crockett munitions in Hawai'i.

Dear Ms. Tarrant

Pursuant to the Freedom Of Information Act (FOIA) 5 U.S.C. § 552, and all amendments thereto, I hereby request the following information:

1. Information, documents and correspondence within the US Army Hawaii and the about chemical weapons and depleted uranium fragments discovered at Schofield Barracks and Pohakuloa since the year 2000.
2. Any and all information about the shipment, storage, training, practice, use and disposal of Davey Crockett munitions and their spotting rounds in Hawai'i.
3. Information related to plans and contracts for radiation monitoring at Army ranges in Hawai'i and including correspondences related to these plans and contracts.

If all or any part of this request is denied, I request that I be provided with a written statement that lists the documents withheld from disclosure and the grounds for the denial. If you determine that some portions of the requested records are exempt from disclosure, please provide me with the portions that can be disclosed.

Thank you very much.

Sincerely,

Kyle Kajihiro

FORGOTTEN HAZARDS ATTACHMENT License

4-21-08 e-mail from Russ Takata, Hawai'i State Dept. of Health, to Jim Albertini

From: Takata, Russell S.
To: Jim Albertini
Sent: Monday, April 21, 2008 4:43 PM
Subject: re: NRC license

Jim,

Regarding your question when the Army was required to have an NRC license. I found out there are at least a half dozen licenses concerning the Army and DU. Licensed activity predates NRC back to the Atomic Energy Commission (AEC). Finding a specific date will require an extensive request for archived records. I frankly do not have the time to do so.

Russ

FORGOTTEN HAZARDS ATTACHMENT License
Source Material License SUB-459, issued to Department of the Army, Washington, D.C., by U.S. Atomic Energy Commission, 11-1-61
To be mailed

FORGOTTEN HAZARDS ATTACHMENT License
Letter from Tyler Port, Acting Assistant Secretary of the Army, to U.S. Atomic Energy Commission, 9-19-61
To be mailed

FORGOTTEN HAZARDS ATTACHMENT License
Application for Source Material License from Department of Army, Washington, D.C., docketed 9-26-61
To be mailed

FORGOTTEN HAZARDS ATTACHMENT License
Letter from Lt. Col. Kraul to Atomic Energy Commission, 5-1-61
To be mailed

FORGOTTEN HAZARDS ATTACHMENT Other discoveries
All to be mailed

LEASE ATTACHMENT
State General Lease No. S-3849 for Pohakuloa, 8-17-64
To be mailed

LEASE ATTACHMENT
HRS 171-35
To be mailed