

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
U.S. ARMY INSTALLATION COMMAND) Docket No. 40-9083
)
(Depleted Uranium at Pohakuloa Training)
Area & Schofield Barracks, Hawai'i))

NRC STAFF'S RESPONSE TO REQUESTS FOR HEARING
AND PETITIONS TO INTERVENE FILED BY COREY HARDEN,
LUWELLA LEONARDI, ISAAC HARP, JIM ALBERTINI, AND OTHERS

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November 6, 2009

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the staff of the Nuclear Regulatory Commission ("Staff") hereby responds to the requests for hearing and petitions to intervene filed by Corey Harden, Luwella Leonardi, Isaac Harp, Jim Albertini, and a number of other individuals. As discussed below, these requests should be denied because they neither establish standing nor meet the contention admissibility requirements. Further, all but one of these requests fails to comport with the NRC's E-filing requirements or fails to properly request an exemption thereto as provided in the *Federal Register* notice announcing the opportunity for a hearing. Finally, the numerous late-filed requests for hearing submitted via e-mail should be denied for all the above reasons, and also because they fail to mention, let alone address, the late-filed contention standards.

BACKGROUND

On November 6, 2008, the U.S. Army Installation Command submitted a license application ("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 Hawaii. On August 13, 2009, a notice of

opportunity to request a hearing or petition for intervention was published in the *Federal Register*, setting the deadline for such as October 13, 2009.¹

On September 22, 2009, Ms. Harden, on behalf of the Moku Loa group of the Sierra Club, requested an extension of time to file a request for hearing and petition to intervene. On September 27, 2009, Jim Albertini, on behalf of the Malu 'Aina Center for Non-violent Education & Action, requested an extension of time for the same reasons outlined by the Sierra Club. On October 9, 2009, the Secretary of Commission granted those requests in part by extending the due date until October 27, 2009. On October 14, 2009, Isaac Harp e-mailed his request for the same extension as granted to Ms. Harden and Mr. Albertini, and on October 16, 2009, the Secretary of the Commission granted his request.

On October 9, 2009, Ms. Harden, filing on her own behalf and not for the Moku Loa group of the Sierra Club, filed by U.S. mail requests for an exemption from e-filing for herself and an extension of time for the public to file requests for hearing and petitions to intervene.² These requests also served as her request for hearing and petition to intervene.³ On October 12, 2009, Luwella Leonardi e-mailed John Hayes⁴ requesting adjudication on the Army's Application.⁵ On October 26, 2009, Isaac Harp e-mailed Staff counsel, Mr. Hayes,

¹ Notice of License Application Request of U.S. Army Installation Command for Schofield Barracks, Oahu, HI and Pohakuloa Training Area, Island of Hawaii, HI; and Notice of Opportunity for Hearing, 74 Fed. Reg. 40,855 (Aug. 13, 2009).

² "Request for Exemption from Electronic Filing and Request for Extension of Time to File a Request for Hearing and Petition for Intervention" (Oct. 9, 2009) ("Ms. Harden's Request for Hearing") (Attachment 1).

³ E-mail from Cory Harden to Brett Klukan, "Re: comment deadline [sic]" (Oct. 28, 2009) (Attachment 2).

⁴ Mr. Hayes is an NRC Senior Project Manager in the Materials Decommissioning Branch of the Division of Waste Management and Environmental Protection of the Office of Federal and State Materials and Environmental Programs. Mr. Hayes is the project manager for the Staff's review of the Army's Application at issue.

(continued. . .)

and others what appeared to be both comments and a request for hearing.⁶ Mr. Harp then sent an e-mail to Mr. Julian requesting to join Ms. Harden's requests for an exemption from e-filing, an extension of time for the public, and a hearing.⁷ In his e-mail, Mr. Harp also submitted his own contention. On October 27, 2009, James Albertini e-mailed Messrs. Julian and Hayes requesting to join Ms. Harden and Mr. Harp's requests for an exemption from e-filing, an extension of time for the public, and a hearing.⁸ In his e-mail, Mr. Albertini also submitted his own contention. On October 30, 2009, Ms. Harden e-mailed an addendum to her October 9, 2009 request for hearing.⁹ In addition, since the October 13, 2009 filing deadline, a great number of individuals have e-mailed Mr. Hayes with requests for hearing.¹⁰

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⁵ E-mail from Luwella Leonardi to John Hayes, "Depleted Uranium public hearing for the Waianae Coast" (Oct. 12, 2009) ("Ms. Leonardi's Hearing Request") (Attachment 3).

⁶ E-mail from Isaac D. Harp to Kimberly Sexton et. al, "Re: comment deadline" (Oct. 26, 2009) ("Mr. Harp's First Hearing Request") (Attachment 4).

⁷ E-mail from Isaac D. Harp to Emile Julian, "Army Request for a Depleted Uranium Possession-only Permit" (Oct. 26, 2009) ("Mr. Harp's Second Hearing Request") (Attachment 5). For the purpose of Staff's response herein, Staff treats the two requests as one.

⁸ E-mail from Jim Albertini to Emile Julian and John Hayes, "NRC hearing request" (Oct. 27, 2009) ("Mr. Albertini's Hearing Request") (Attachment 6).

⁹ Letter from Corey Harden to the Office of the Secretary of the Commission, dated October 30, 2009 ("Ms. Harden's Addendum") (Attachment 7).

¹⁰ The Staff is aware of, and has forwarded to the Office of the Secretary, the following requests: E-mail from Michael Freigang to John Hayes, "DU PTA" (Oct. 27, 2009) (Attachment 8); E-mail from Tek Nickerson to John Hayes, "Independent monitoring for Pohakuloa and the eight other Training Ranges" (Oct. 27, 2009) (Attachment 9); E-mail from Lisa Raphael to John Hayes, "protection from depleted uranium" (Oct. 27, 2009) (Attachment 10); E-mail from Michael Shooltz to John Hayes, "Pohakuloa" (Oct. 27, 2009) (Attachment 11); E-mail from Jonathan Cole to John Hayes, "Comments for the NRC re: Hawaii Island and Pohakuloa Training Ground" (Oct. 23, 2009) (Attachment 12); E-mail from Elaine Durbin to John Hayes, "Depleted uranium abuses" (Oct. 27, 2009) (Attachment 13); E-mail from Leslie Ann Laing to John Hayes, "Depleted Uranium" (Oct. 27, 2009) (Attachment 14); E-mail from Michael Swerdlow to John Hayes, "Polluting Pohakuloa" (Oct. 23, 2009) (Attachment 15); E-mail from Lisa Andrews to John Hayes, "Aloha from Hawaii" (Oct. 26, 2009) (Attachment 16); E-mail from David Schlesinger to John Hayes, "Aloha John" (Oct. 23, 2009) (Attachment 17); E-mail from Jeff Sacher to John Hayes (Oct. 23, 2009) (Attachment 18); E-mail from April Lee to John Hayes, "Independent monitoring for Pohakuloa +" (Oct. 23, 2009) (Attachment 19); E-mail from Pash Galbavy (continued. . .)

DISCUSSION

A hearing request must be denied unless the petitioner demonstrates it has standing to intervene in the proceeding and submits at least one admissible contention. 10 C.F.R. § 2.309(a). For the reasons stated below, the individual petitioners do not demonstrate standing to intervene in this proceeding. Moreover, even if the individual petitioners were found to have standing, none have submitted a contention that meets the NRC's standards for contention admissibility.

I. Standing to Intervene

A. Applicable Legal Requirements

1. Traditional Standing to Intervene

Under the NRC's Rules of Practice:

[a]ny person whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene and a specification of the contentions which the person seeks to have litigated in the hearing.

10 C.F.R. § 2.309(a). NRC regulations further provide that the presiding officer "will grant the request [for a hearing] if it determines that the requestor has standing under the provisions of [10 C.F.R. § 2.309(d)] and has proposed at least one admissible contention that meets the requirements of [10 C.F.R. § 2.309(f)]." *Id.*

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to John Hayes, "DU" (Oct. 23, 2009) (Attachment 20); E-mail from Andrea Cronrod to John Hayes, "monitoring for depleted uranium" (Oct. 23, 2009) (Attachment 21); E-mail from Joel Levey to John Hayes, "NRC – Request EIS for all ranges" (Oct. 26, 2009) (Attachment 22); E-mail from Stephanie Naihe Laxton to John Hayes, "Nuclear Regulatory Commission" (Oct. 26, 2009) (Attachment 23); E-mail from Angela Rosa to John Hayes, "NRC hearing request" (Oct. 28, 2009) (Attachment 24) ("Ms. Rosa's Hearing Request"); E-mail from Jasper Moore to John Hayes, "request for EIS and a formal hearing" (Oct. 28, 2009) ("Mr. Moore's Hearing Request") (Attachment 25); E-mail from Shannon Rudolph to John Hayes, "****NRC : Comments" (Oct. 23, 2009) (Attachment 26); E-mail from Barbara Moore to John Hayes, "Please Disallow DU at PTA" (Oct. 14, 2009) ("Ms. Moore's Hearing Request") (Attachment 27).

Under the general standing requirements in 10 C.F.R. § 2.309(d)(1), a request for hearing must state:

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor's/petitioner's right under the [Atomic Energy Act (AEA) of 1954, 42 U.S.C. Sect. 2011 *et seq.*] to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

In making a standing determination, the presiding officer is to "construe the [intervention] petition in favor of the petitioner." *Georgia Inst. of Tech.* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995).

The Commission has long applied contemporaneous judicial concepts of standing to determine whether a party has a sufficient interest to intervene as a matter of right. *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998). To establish standing in a Subpart L materials licensing case, a petitioner must allege "(1) an actual or threatened, concrete and particularized injury, that (2) is fairly traceable to the challenged action, (3) falls among the general interests protected by the Atomic Energy Act (or other applicable statute, such as the National Environmental Policy Act) and (4) is likely to be redressed by a favorable decision." *Sequoyah Fuels Corp.* (Gore, Oklahoma Site Decommissioning), CLI-01-02, 53 NRC 9, 13 (2001). Furthermore, the injury must be "concrete and particularized," not "conjectural" or "hypothetical." *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 72 (1994) (*quoting O'Shea v. Littleton*, 414 U.S. 488, 494 (1974)). As a result, standing can be denied when the threat of injury is too speculative. *Id.*

Additionally, a petitioner must establish a causal nexus between the alleged injury and the challenged action. *Ala. Dep't of Transp.*, CLI-04-26, 60 NRC 399, 405 (2004) (citations omitted). A determination that the injury is fairly traceable to the challenged action does not depend "on whether the cause of the injury flows directly from the challenged action, but whether the chain of causation is plausible." *Sequoyah Fuels*, CLI-94-12, 40 NRC at 75. Finally, the redressability element of standing requires a petitioner to show that the claimed actual or threatened injury could be cured by some action of the decisionmaker. *Sequoyah Fuels Corp.*, CLI-01-2, 53 NRC at 14.

2. Proximity Plus

Commission practice allows petitioners an alternate way of establishing standing, without an inquiry into traditional standing requirements, through presumptions based on geographical proximity. The Commission has historically presumed standing in power reactor construction permit and operating license proceedings based on a petitioner's 50-mile proximity to the facility. *Florida Power & Light, Co.* (St. Lucie, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989); *Calvert Cliffs 3 Nuclear Project, LLC & Unistar Nuclear Operating Servs., LLC* (Combined License Application for Calvert Cliffs, Unit 3), CLI-09-20, 70 NRC ____ (Oct. 13, 2009) (slip op. at 5). In nuclear materials cases, however, "proximity alone does not suffice for standing, absent an 'obvious' potential for offsite harm." *Nuclear Fuel Servs., Inc.* (Erwin, Tennessee), CLI-04-13, 59 NRC 244, 248 (2004). "Whether and at what distance a petitioner can be presumed to be affected must be judged on a case-by-case basis, taking into account the nature of the proposed action and the significance of the radioactive source." *Georgia Tech Research Reactor*, CLI-95-12, 42 NRC at 116-17. For instance, "a presumption based on geographical proximity (albeit at distances much closer than 50 miles) may be applied where there is a determination that the proposed action involves a significant source of radioactivity producing an obvious potential for offsite

consequences.” *Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 75 n.22. “Where there is no ‘obvious’ potential for radiological harm at a particular distance frequented by a petitioner, it becomes the petitioner’s ‘burden to show a specific and plausible means’ of how the challenged action may harm him or her.” *USEC, Inc. (American Centrifuge Plant)*, CLI-05-11, 61 NRC 309, 311-12 (2005) (*quoting Nuclear Fuel Servs., Inc.*, CLI-04-13, 59 NRC at 248). “Conclusory allegations about potential radiological harm” are not sufficient to establish standing. *Nuclear Fuel Services, Inc.*, CLI-04-13, 59 NRC at 248.

B. Individual Petitioners’ Standing to Intervene

None of the individual petitioners attempt to address the standing requirements. However, because standing is construed in favor of the petitioner, *Georgia Tech Research Reactor*, CLI-95-12, 42 NRC at 115, and “longstanding agency precedent instructs us that, as a rule, *pro se* petitioners are not held to the same standard of pleading as those represented by counsel,” *Shaw Areva MOX Servs. (Mixed Oxide Fuel Fabrication Facility)*, LBP-07-14, 66 NRC 169, 188 (2007) (*citing Public Service Elec. & Gas Co. (Salem Nuclear Generating Station, Units 1 & 2)*, ALAB-136, 6 AEC 487 (1973)), the Staff has sought to discern whether standing has been demonstrated in each request for hearing. All petitions, nevertheless, still fail to demonstrate standing because they do not establish with sufficient information a particularized interest in the instant proceeding. Further, even though it appears that all petitioners live either on Oahu or the Big Island of Hawaii where the Schofield Barracks and Pohakuloa Training Areas are respectively located, and that their towns and/or home addresses are located within 30 miles of one of the two sites, none have attempted to show that the proposed action presents an obvious potential for offsite radiological harm. Thus, petitioners also fail to state facts that would establish a “proximity plus” basis for standing.

1. Corey Harden

Ms. Harden failed to demonstrate standing because she did not establish any actual or imminent injury-in-fact stemming from the requested possession-only license that is likely to be redressed by a favorable decision. Ms. Harden's argument for standing appears to be that she resides on the Big Island of Hawaii "where some of the depleted uranium (DU) spotting rounds were used" and that she believes that the actual number of spotting rounds used at the Pohakuloa Training Area is greater than the U.S. Army states. Ms. Harden's Hearing Request at 1-2. At no point does she reference any type of injury apart from the possibility that "very different conditions may eventually be written into the Army DU license" depending on the number of spotting rounds found to be used. Thus, Ms. Harden has not shown a specific and plausible means by which the granting of a possession-only license to the Army will harm her, nor does Ms. Harden show how any of her concerns are likely to be redressed by a favorable ruling. Further, Ms. Harden provides no reference at all to potential offsite radiological harm. Therefore, Ms. Harden has failed to establish standing to intervene.

2. Luwella Leonardi

Like Ms. Harden, Ms. Leonardi has failed to demonstrate standing because she does not establish any actual or imminent injury-in-fact stemming from the requested possession-only license that is likely to be redressed by a favorable decision. Ms. Leonardi's Hearing Request states that her community, the Waianae Coast, has "for many years been in undated [sic] with bombing plume dust from the military here in Hawaii and specifically on the Waianae Coast. The military has trained and practiced their bombing in my community as well as their own community for a decade." Ms. Leonardi's Hearing Request. The assumption here is that there is an aerial transport of depleted uranium from Schofield Barracks to her community due to continued bombing that has sickened her community, presumably her as well. This type of conjecture, without demonstrating a plausible chain of

causation, cannot sustain a finding of standing. Further, although Ms. Leonardi lives within 10 miles of Schofield Barracks, because she is unable to provide a specific and plausible means of how the depleted uranium on Schofield Barracks relates to these alleged harms, she is has not demonstrated a proximity plus basis for standing.

Ms. Leonardi also alleges that she has seen trucks that leave Schofield Barracks “unload their load directly in back of my house” and that as a result of this, Ms. Leonardi has “been in undated [sic] by this plume for many years.” *Id.* Ms. Leonardi has not shown that the injury she raises is redressible by a favorable decision. The Army has applied for a possession-only license, and the transport of material containing depleted uranium off-site is beyond the scope of the license application. Thus, if Ms. Leonardi is in fact correct that debris containing depleted uranium is deposited in her backyard, or anyone else’s, the denial of the application for a possession-only license would not redress Ms. Leonardi’s injury. Therefore, in either scenario, aerial transport of depleted uranium or depositing of depleted uranium debris off-site, Ms. Leonardi has failed to state an actual or imminent injury-in-fact, traceable to the license application, that is redressable by a favorable decision or a basis for proximity plus standing.

3. Isaac Harp

Mr. Harp has also failed to demonstrate standing because he does not establish any actual or imminent injury-in-fact stemming from the requested possession-only license that is likely to be redressed by a favorable decision. Mr. Harp’s First Hearing Request provides no insight into any direct harm he might suffer as a result of the NRC granting the Army’s Application apart from a vague claim that “the Army has unleashed what [he] consider[s] a never-ending threat to the health and well-being of Hawaii’s lands and Hawaii’s residents, both native and non-native.” *Id.* Mr. Harp repeats this claim in his Second Hearing Request and then claims that the environment of the island of Hawaii and the health of its residents,

presumably including him as well since he apparently lives on the island, could potentially be “threat[ened]” by depleted uranium and the “on-going aerial [sic] bombing, artillery bombardment, air to ground missiles, and other live-fire munitions.” *Id.* He then follows with what appears to be an argument that cancer-clusters exist where live-fire training has or is occurring. *Id.* Presumably, these cancer-clusters exist because, according to his claim, “[d]epleted [u]ranium has been pointed to as the probable cause of various cancers and other mysterious illnesses that many military veterans suffer from.” *Id.* For the reasons stated above for Ms. Harden and Ms. Leonardi, these allegations do not show an injury-in-fact with sufficient specificity to establish standing. Instead, they are merely “conjectural” or “hypothetical” statements that lack any support and fail to provide a plausible chain of causation for his stated harms. See *Sequoyah Fuels*, CLI-94-12, 40 NRC at 72.

Further, although Mr. Harp’s P.O. Box is approximately 20 miles away from Pohakuloa Training Area,¹¹ he has not shown a plausible basis for the assertion that depleted uranium will travel from Pohakuloa to Kamuela in a manner sufficient to cause him harm. He also provides no support for his assertions about off-site cancer, environmental, and health risks from a possession-only license at Pohakuloa Training Area. Mere “conclusory allegations about potential radiological harm” are not sufficient to demonstrate proximity plus standing. *Nuclear Fuel Servs., Inc.*, CLI-04-13, 59 NRC at 248.

4. Jim Albertini

Mr. Albertini’s standing argument is similar to that of Ms. Leonardi and Mr. Harp: depleted uranium travels in the air off of the Pohakuloa Training Area and this airborne

¹¹ Mr. Harp provided as his address a P.O. Box in Kamuela, Hawaii. While providing only a P.O. Box without a home address has been found to be a significant deficiency in any standing request, see *International Uranium (USA) Corp. (White Mesa Uranium Mill)*, LBP-97-12, 46 NRC 1, 8 (1997), *aff’d*, CLI-98-6, 47 NRC 116 (1998), absent any other facts to show the location of Mr. Harp’s residence, the Staff will assume that Mr. Harp lives near the Kamuela area, which appears to be around 20 miles away from Pohakuloa Training Area.

depleted uranium poses certain “inhalation hazard[s].” Mr. Albertini, however, specifically referenced a time where he “recorded readings of up to 75 counts per minute” at a location one to two miles away from Pohakuloa Training Area. Mr. Albertini’s Hearing Request. But, Mr. Albertini failed to show how a brief reading of 75 counts per minute, assuming above background, has any potential for radiological harm or was an offsite consequence of the U.S. Army’s operations at Pohakuloa Training Area. Instead, Mr. Albertini states a general “inhalation hazard of DU oxide” and claims there are “[r]eports of animal tumors in the PTA area [that] need to be investigated for possible links to DU exposure.” Like Mr. Harp and Ms. Leonardi, Mr. Albertini does not explicitly connect this allegation to a personal injury, but the Staff assumes that Mr. Albertini has a personal interest because he lives on the same island as the Pohakuloa Training Area. For the reasons stated regarding Ms. Leonardi and Mr. Harp’s standing, Mr. Albertini has failed to demonstrate standing and thus his petition to intervene should be denied.

Further, the P.O. Box that Mr. Albertini provided appears to be about 30 miles away from the Pohakuloa Training Area.¹² Mr. Albertini has not shown a plausible basis for how airborne depleted uranium will travel over 30 miles to Kurtistown in a manner sufficient to cause him harm. Finally, he only claims to have visited an area close to Pohakuloa Training Area once; thus, even if there were some danger within one to two miles from Pohakuloa Training Area, Mr. Albertini has not shown that he would be harmed in the future. These conclusory allegations are not sufficient to establish proximity plus standing. *Nuclear Fuel Services, Inc.*, CLI-04-13, 59 NRC at 248.

¹² Although apparently filing individually, Mr. Albertini provided as his address a P.O. Box in Kurtistown, Hawaii where the Malu ‘Aina Center for Non-violent Education & Action is located. While providing only a P.O. Box without a home address has been found to be a significant deficiency in any standing request, see *White Mesa*, LBP-97-12, 46 NRC at 8, absent any other facts to show the location of Mr. Albertini’s residence, the Staff will assume that Mr. Albertini lives near the Kurtistown area, which appears to be around 30 miles away from Pohakuloa Training Area.

5. Barbara Moore

Ms. Moore is apparently the proprietress of the Dragonfly Ranch in Honaunau, Hawaii, which appears to be approximately 30 miles away from the Pohakuloa Training Area.¹³ Ms. Moore states that she contracted chronic lymphoid leukemia after being “caught in a dust devil” at the Pohakuloa Training Area in 2007. Ms. Moore believes her disease is due to depleted uranium and believes that other “down winders” are also experiencing similar health effects. Ms. Moore’s hearing request, however, does not demonstrate that she has standing. Ms. Moore fails to specify an injury that is fairly traceable to the proposed action. Ms. Moore’s alleged harm occurred in the past, and because she only claims to have visited Pohakuloa Training Area once, she has not shown that she would be harmed in the future. Finally, like Mr. Albertini, Ms. Moore fails to allege a plausible chain of causation by which depleted uranium to be licensed for possession-only in Pohakuloa will cause her harm.

6. Other Petitions

All of the other petitions, not already specifically addressed, fail to demonstrate standing because none even attempt to establish any actual or imminent injury-in-fact stemming from the requested possession-only license that is likely to be redressed by a favorable decision.

II. Admissibility of the Petitioners’ Proffered Contentions

A. Legal Requirements Governing Contention Admissibility

In addition to a showing of standing, a petitioner, in order to gain admission to a hearing as a party, must submit at least one contention that meets the admissibility

¹³ No other address or residence is provided apart from the electronic signature on her e-mail, which states that she is the “soul proprietor of Dragonfly Ranch: HEALING ARTS CENTER.” A visit to the Dragonfly Ranch website, <http://www.dragonflyranch.com/map.html>, shows that the Dragonfly Ranch is located in Honaunau, Hawaii. For the purposes of this filing, the Staff assumes that Ms. Moore frequents or has regular personal contact with the Dragonfly Ranch.

requirements of 10 C.F.R. § 2.309(f)(1). See 10 C.F.R. § 2.309(a). Once an adjudicatory proceeding has begun, in addition to 10 C.F.R. § 2.309(f)(1), two other sections of the NRC's regulations address the admissibility of newly proposed contentions: "(a) 10 C.F.R. § 2.309(f)(2), which deals with the admission of new and timely contentions [and] (b) 10 C.F.R. § 2.309(c), which deals with the admission of nontimely contentions . . ." *Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571-72 (2006).

1. General Admissibility Requirements of 10 C.F.R. § 2.309(f)(1).

10 C.F.R. § 2.309(f)(1) establishes the "basic criteria that all contentions must meet in order to be admissible." *Vermont Yankee*, LBP-06-14, 63 NRC at 571-72. Pursuant to that section, a contention must:

- (1) provide a specific statement of the legal or factual issue sought to be raised;
- (2) provide a brief explanation of the basis for the contention;
- (3) demonstrate that the issue raised is within the scope of the proceeding;
- (4) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (5) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing; and
- (6) provide information sufficient to show that a genuine dispute with the applicant exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case of an application that is asserted to be deficient, the identification of such deficiencies and supporting reasons for this belief.

10 C.F.R. § 2.309(f)(1).

Sound legal and policy considerations underlie the Commission's contention pleading

requirements. The purpose of the contention rule is to “focus litigation on concrete issues and result in a clearer and more focused record for decision.” Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). The Commission “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.” *Id.* The requirements for contention admissibility are “strict by design.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001). Failure to comply with any of the requirements in 10 C.F.R. § 2.309(f)(1) is grounds for dismissal of the contention. Changes to Adjudicatory Process, 69 Fed. Reg. at 2221; *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999). “Mere ‘notice pleading’ does not suffice.” *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006) (internal citation omitted). A contention must be rejected where, rather than raising an issue that is concrete or litigable, it reflects nothing more than a generalization regarding the petitioner’s view of what the applicable policies ought to be. *Private Fuel Storage, L.L.C.*, (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 129 (2004) (*citing Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974)).

2. Admissibility of New or Amended Contentions

In addition to the general admissibility factors of 10 C.F.R. § 2.309(f)(1), to establish the admissibility of a contention initially filed or submitted after the established deadline for so doing, “the first step is to determine if the [new or amended] contention is ‘timely’ and otherwise meeting the requirements of 10 C.F.R. § 2.309(f)(2).” *Vermont Yankee*, LBP-09-04, 63 NRC at 572 (*citing Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-05-32, 62 NRC 813, 819 (Dec. 2, 2005)). That section provides that:

contentions may be amended or new contentions filed after the initial filing only with leave of the presiding officer upon a showing that—

- (i) The information upon which the amended or new contention is based was not previously available;
- (ii) The information upon which the amended or new contention is based is materially different than the information previously available; and
- (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(f)(2). If a contention is not “timely” pursuant to the criteria of 10 C.F.R. § 2.309(f)(2), the admissibility of the nontimely contention is predicated upon an evaluation of the contention “according to [the] eight potentially applicable factors” of 10 C.F.R. § 2.309(c)(1). *Vermont Yankee*, 63 NRC at 574-75. Pursuant to 10 C.F.R. § 2.309(c)(1), nontimely contentions will not be entertained absent a determination that a balance of the following eight factors—all of which *must* be addressed by the petitioner in its nontimely filing—weighs in favor of the contention’s admission:

- (i) Good cause, if any, for the failure to file on time;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding;
- (iv) The possible effect of any order that may be entered in the proceeding on the requestor's/petitioner's interest;
- (v) The availability of other means whereby the requestor's/petitioner's interest will be protected;
- (vi) The extent to which the requestor's/petitioner's interests will be represented by existing parties;
- (vii) The extent to which the requestor's/petitioner's participation will broaden the issues or delay the proceeding; and

- (viii) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record.

10 C.F.R. § 2.309(c). The first of the foregoing factors, the “good cause” factor, is entitled to the most weight in the balancing test. See *e.g.*, *Millstone*, CLI-05-24, 62 NRC at 564 (*citing Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-00-02, 51 NRC 77, 79 (2000); *State of New Jersey* (Department of Law and Public Safety’s Requests Dated Oct. 8, 1993), CLI-93-25, 38 NRC 289, 296 (1993)). “To demonstrate good cause, a petitioner must show not only why it could not have filed within the time specified in the notice of opportunity for hearing, but also that it filed as soon as possible thereafter.” *Millstone*, 62 NRC at 564-65 (*citing State of New Jersey*, 38 NRC at 295). If a petitioner does not make a showing of good cause, “then its demonstration of the other factors must be ‘compelling.’” *Id.* (*quoting State of New Jersey*, 38 NRC at 296).

B. Individual Petitioners’ Proposed Contentions

1. Jim Albertini

Mr. Albertini’s contentions should be rejected because he fails to comply with the contention pleading requirements of 10 C.F.R. § 2.309(f)(1). Recounting a radiation reading of 75 counts per minute at Mauna Kea Park, Mr. Albertini argues that the Army’s “search of contamination is inadequate.” Mr. Albertini’s Hearing Request. According to Mr. Albertini, less than one percent of the PTA has been surveyed for depleted uranium contamination. *Id.* In light of this, he asserts that “[t]here needs to be permanent independent air monitoring around the base to determine radiation coming off the base.” *Id.* Mr. Albertini posits that there should a “thorough and complete search of record archives . . . other possible DU munitions used at PTA and other sites in Hawaii beyond the Davy Crockett DU spotting round.” *Id.* He states that reports of animal tumors in the PTA area “need to be investigated for possible links to DU exposure.” *Id.* Moreover, Mr. Albertini claims that the Army fails to

account for the potential use of depleted uranium in training between 1962 and 1996, when the Army banned the use of depleted uranium in training. *Id.* In addition, Mr. Albertini avers that the U.S. Army has, in effect, ignored Hawaii County Council resolutions 639-08 and 701-08. *Id.*

The concerns and allegations raised by Mr. Albertini do not satisfy the elements of 10 C.F.R. § 2.309(f)(1). Lacking any explanation or context as to which to ascribe meaning, Mr. Albertini's recount of a radiation reading of 75 is not sufficiently articulated to support any of his asserted claims. Likewise, Mr. Albertini does not explain why the Army's description of contamination at the PTA in the Application is inadequate. Correspondingly, he gives no factual argument or expert opinion regarding the need for permanent independent air monitoring at the PTA. Moreover, he does not provide any factual discussion or expert support for his claim that there needs to be a thorough and complete search of record archives and, therefore, his assertion is without sufficient basis. Mr. Albertini does not cite to any portion of the Application that he disputes, and thus he does not raise a genuine dispute with the Applicant. He provides no information to assess whether his concerns are within the scope of this proceeding or relate to material findings the NRC must make. As "the NRC's adjudicatory process [is] not the proper forum for investigating alleged violations that are primarily the responsibility of other . . . state[] or local agencies . . .", Mr. Albertini's claims that the Army has ignored Hawaii County Council Resolutions 639-08 and 701-08 are outside the scope of this proceeding. *See PPL Susquehanna LLC (Susquehanna Steam Elec. Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 105 (2007)*. For the foregoing reasons, the Commission should reject Mr. Albertini's proposed contentions.¹⁴

¹⁴ Angela Rosa's request for hearing is identical to that of Mr. Albertini. Thus, for the same reasons that Mr. Albertini's contentions must be rejected, so too must those of Ms. Rosa. In addition, Ms. Rosa's hearing request is untimely. She did not submit her request for hearing until October 28, (continued. . .)

2. Luwella Leonardi

Ms. Leonardi's contention should be rejected because she fails to comply with the contention pleading requirements of 10 C.F.R. § 2.309(f)(1). In addition, Ms. Leonardi fails to raise material issue within the scope of this proceeding. Ms. Leonardi claims that the Army excavated, transported, and deposited near her residence on the Waianae Coast contaminated soil from Schofield Barracks. She states that airborne dust from the contaminated soil has caused sickness and death in her community. However, Ms. Leonardi fails to allege with specificity the issues she intends to raise with this contention. Ms. Leonardi fails to proffer any factual or expert support for her proposition that there is a causal link between exposure to dust from the supposedly contaminated soil and adverse health effects. Moreover, she does not provide sufficient information to demonstrate a genuine material dispute with the Applicant with respect to its application for a possession-only license. Her claims are outside of the scope of this proceeding in that this proceeding does not involve transportation of DU offsite. See *Florida Power and Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4)* CLI-00-23, 52 NRC 327, 329 (2000). As such, Ms. Leonardi's contention should be rejected.

(. . .continued)

2009—15 after the October 13, 2009, deadline. She makes no attempt to establish that (1) the information upon which she relies to formulate her contentions was not previously available at the time by which initial petitions were due in this proceeding and, further, that, (2) such information is materially different from information that was available at the time by which initial petitions were due. As such, her contentions cannot be considered "timely" pursuant to 10 C.F.R. § 2.309(f)(2). Moreover, Ms. Rosa fails to address the factors of 10 C.F.R. § 2.309(c)(1). The Commission has summarily dismissed a petitioner's filing for failure to address the factors for admission of nontimely contentions. See *e.g., Millstone*, CLI-05-24, 62 NRC at 564 (*citing Private Fuel Storage, LLC*, CLI-00-02, 51 NRC at 79; *State of New Jersey*, CLI-93-25, 38 NRC at 296). As such, in light of her failure to address these factors, her contentions should be rejected.

3. Isaac Harp

Mr. Harp's contentions should be rejected because he fails to comply with the contention pleading requirements of 10 C.F.R. § 2.309(f)(1). Mr. Harp poses the following questions:

- 1) What are the consequences for the Army's intentional violations of federal law over a period of nearly 5 decades,
- 2) What additional consequences will be applied to the Army for intentionally concealing their crimes, and
- 3) What will be done to insure the Army's accountability of and removal of depleted uranium munitions and depleted uranium waste from Hawaii?

Mr. Harp's First Hearing Request. Referencing a map of cancer rates in Hawaii, he posits that the area around the PTA has the highest rate of cancer in Hawaii. Mr. Harp's Second Hearing Request. Mr. Harp has a "suspicion based on past Army lies" that the Army has not fully disclosed the extent of its use of munitions containing depleted uranium in Hawaii. *Id.* Furthermore, citing to Executive Order 12898, Mr. Harp contends that "[b]ecause we know that depleted uranium now pollutes Hawaii, environmental justice is definitely required to minimize the potential environmental and health threats of this material." *Id.*

The foregoing contentions must be rejected because Mr. Harp has not satisfied any of the elements of 10 C.F.R. § 2.309(f)(1). While he references Executive Order 12898, Mr. Harp, nonetheless, fails to articulate with sufficient specificity how a violation of the terms of such is occurring. Even though two of his posed questions reference Federal law, Mr. Harp nowhere describes what he believes to be the Army's intentional violations of Federal law. Moreover, absent any factual or expert support, his questions amount to nothing more than speculation of violations of law. Mr. Harp's questions do not raise a genuine dispute with the Applicant, nor does he establish the materiality of his questions and claims. In light of the foregoing, Mr. Harp has failed to comply with the elements of 10 C.F.R. § 2.309(f)(1).

4. Cory Harden

Ms. Harden's contention fails to raise a material issue within the scope of this proceeding, contrary to the requirements of 10 C.F.R. § 2.309(f)(1). Moreover, the contentions articulated in her Addendum are unjustifiably untimely. In her request for hearing, Ms. Harden bases her one contention on the unavailability to the public of two documents: "(1) the Archives Search Report (ASR) and (2) an official Army document stating the decision not to do a Human Health Risk Assessment (HHRA) for Pohakuloa, and giving the scientific basis for this decision." Ms. Harden's Request for Hearing at 4. According to Ms. Harden, "[s]ince these two documents are not readily available alongside related documents on ADAMS, the public is prevented from making informed decisions about filing requests for hearing and petitions for intervention, and from making informed comments on the Application." *Id.* However, while Ms. Harden indicates why the missing information would be useful to the public, she never identifies why the information was legally required to be in the Application. "To satisfy [10 C.F.R. §] 2.309(f)(1)(i)-(ii), [a] contention of omission must describe the information that should have been included in the [Application] and *provide the legal basis that requires the omitted information to be included.*" *Calvert Cliffs 3 Nuclear Project, LLC, and Unistar Nuclear Op. Servs., LLC (Combined License Application for Calvert Cliffs Unit 3), LBP-09-4, 69 NRC 170, 190 (2009) (emphasis added).* As Mr. Harden fails to proffer this legal basis, her contention should be denied.

In addition to restating the foregoing contention, Ms. Harden raises two new contentions in her Addendum. Ms. Harden's Addendum at 2. As one contention, Ms. Harden requests "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." *Id.* As the other contention, Ms. Harden requests "that the 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.” *Id.* However, her Addendum is untimely. In addition, the two new contentions do not comport with the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).

First, Ms. Harden's Addendum is untimely. Although Ms. Harden was granted until the 27th of October by which to file a request for hearing on behalf of the Sierra Club, she did not file her Addendum until the 30th. *Id.* at 1. As such, Ms. Harden needed to establish that (1) the information upon which she relies to formulate her two new contentions was not previously available at the time by which her petition was due in this proceeding and, further, that, (2) such information is materially different from information that was available at the time by which her petition was due. Absent such discussion, her two new contentions are not deemed “timely” pursuant to 10 C.F.R. § 2.309(f)(2).

Ms. Harden fails to address the factors of 10 C.F.R. § 2.309(c)(1). The Commission has summarily dismissed a petitioner's filing for failure to address the factors for admission of nontimely contentions. See *e.g.*, *Millstone*, CLI-05-24, 62 NRC at 564 (*citing Private Fuel Storage, LLC*, CLI-00-02, 51 NRC at 79; *State of New Jersey*, CLI-93-25, 38 NRC at 296). As such, in light of her failure to address these factors, the two new contentions in the Addendum should be rejected.

Even if the Addendum had been timely filed, the two new contentions in the Addendum do not meet of the general admissibility requirements of 10 C.F.R. § 2.309(f)(1). In support of her contention regarding air monitoring, Ms. Harden references the opinions of Dr. Reimer and Dr. Pang. Ms. Harden does not show, however, that these opinions refer to, or are based upon, information contained in the Application. Further, she does not claim that information regarding airborne depleted uranium is missing from the Application or is wrong. As such, Ms. Harden has not demonstrated a genuine material dispute with the Applicant as

to the issue raised by this contention. Therefore, Ms. Harden's contention regarding air monitoring should be rejected.

Ms. Harden's second contention also does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). Ms. Harden's request that the NRC order all military forces, including those of other countries, search their records for "forgotten radioactive hazards" is beyond the scope of this adjudicatory proceeding. While Ms. Harden contends that the Army's information in general may be "unreliable," she does not specify that any legally required information is missing from the Application or that the information contained in the Application is wrong. As such, she fails to establish a genuine dispute with the Applicant concerning a material finding the NRC must make. This contention amounts to nothing more than an impermissible "fishing expedition." See *Entergy Nuclear Generating Co. and Entergy Nuclear Ops., Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 356 (2006) (*quoting* Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33168, 33171 (Aug. 11, 1989) ("It is true that this will preclude a contention from being admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.")). Therefore, this contention should be rejected.

5. Barbara Moore

The contention proposed by Ms. Moore does not comply with the contention pleading requirements of 10 C.F.R § 2.309(f)(1). Moreover, her contention is unjustifiably untimely. Ms. Moore "requests that there be a public hearing that allows our residents the right to protect themselves from this invasive substance that destroys the health of our residents." B. Moore Petition at 1. Like Mr. Albertini, she states that she was present at Mauna Kea Park in 2007 when she "was caught in a dust devil as [she] looked at the meter spike in the

dangerous zone.” *Id.* at 1-2. She claims that the exposure to the “dust devil” has caused her “serious health problems resembling issues that develop after exposure to depleted uranium.” *Id.* at 2. She declares that she has chronic lymphoid leukemia. *Id.* Furthermore, she asserts that “cancer has increased for us ‘down winders’ so that I am not the only victim suspected of suffering from the effects of DU on this island.” *Id.*

First, Ms. Moore did not submit her request for hearing until after the October 13, 2009 deadline and, thus, her request is late. *See id.* at 1. She makes no attempt in her request to establish that (1) the information upon which she relies to formulate her contentions was not previously available at the time by which initial petitions were due in this proceeding and, further, that, (2) such information is materially different from information that was available at the time by which initial petitions were due. As such, her contentions cannot be considered “timely” pursuant to 10 C.F.R. § 2.309(f)(2). Moreover, Ms. Moore fails to address the factors of 10 C.F.R. § 2.309(c)(1). In light of her failure to address these factors, her contention should be rejected and her request for hearing denied.

Moreover, Ms. Moore’s contention must be rejected because she has not satisfied any of the elements of 10 C.F.R. § 2.309(f)(1). Ms. Moore does not articulate specifically what population of people in Hawaii are being negatively impacted from airborne depleted uranium. While she claims that her negative health effects and those of others are the result of exposure to depleted uranium, Ms. Moore fails to provide any factual support or expert corroboration for this claim. It is unclear from the text of her request what issue she is raising with the Application—in what manner the Application is either incorrect or incomplete with regard to public health effects of exposure to airborne depleted uranium. Commission practice does not “permit ‘notice pleading’” and, therefore, the Commission does not permit the “‘filing of vague, unparticularized contention[s],’ unsupported by affidavit, expert, or documentary support.” *N. Alt. Energy Serv. Corp. (Seabrook Station, Unit 1) CLI-99-6*, 49

NRC 201, 219 (1999) (*quoting Baltimore Gas & Elec. Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 349 (1998)*). A petitioner may not rely on mere speculation nor bare assertions as support for the admission of a proffered contention. *See Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)*. Since Ms. Moore's contention is based only on speculations and conclusory assertions regarding health impacts of alleged exposure to depleted uranium caused by the Applicant's activities at the Pohakuloa Training Area, her contention should be rejected.

6. Jasper Moore

Mr. Moore's contention does not comply with the contention pleading requirements of 10 C.F.R. § 2.309(f)(1) because it consists only of unsupported remarks. Referencing a map of cancer rates in Hawaii, Mr. Moore queries why there is a relatively higher rate of cancer on the Big Island. J. Moore Petition at 1. He believes that the difference cannot be attributed to differences in "age of population and density of population." *Id.* Mr. Moore also asserts that the NRC should address the "simple fact that D.U. is highly pyphoric [sic]." *Id.* According to Mr. Moore, "[n]othing short of covering over vast acreage of Pohakuloa with concrete will protect exposure of D.U. . . . tiny particles of which burn and become finer than gas. This is not practical." *Id.* Mr. Moore also directs the NRC, to "address the question of the quality of drinking water for the community." *Id.* at 2.

While Mr. Moore makes certain requests of the NRC, he does not identify a dispute with the Applicant—that the Application is either incorrect or incomplete with regard to the hazards of exposure to depleted uranium. Further, Mr. Moore provides no basis for his claim that that depleted uranium has spread offsite and is contaminating his drinking water. He fails to explain the basis for his opinion that relatively high cancer rates on the Big Island are due to exposure to depleted uranium. In sum, Mr. Moore fails to proffer any corroboration for the claims he makes. The Commission does not permit the "filing of vague, unparticularized

contention[s],’ unsupported by affidavit, expert, or documentary support.” *Seabrook*, CLI-99-6, 49 NRC at 219 (*quoting Calvert Cliffs*, CLI-98-25, 48 NRC at 349). A petitioner may not rely on mere speculation nor bare assertions as support for the admission of a proffered contention. *See Fansteel*, CLI-03-13, 58 NRC at 203. Since Mr. Moore’s contention consists of is unsupported conclusory remarks, it should be rejected.

In addition, Mr. Moore’s contention is untimely. Mr. Moore did not submit his Petition until October 28, 2009 and was never granted an extension of time beyond the October 13, 2009 deadline. Mr. Moore makes no attempt to establish that (1) the information upon which he relies to formulate his contention was not previously available at the time by which initial petitions were due in this proceeding and, further, that, (2) such information is materially different from information that was available at the time by which initial petitions were due. Absent such discussion, his contention cannot be considered “timely” pursuant to 10 C.F.R. § 2.309(f)(2). Mr. Moore also fails to address the factors of 10 C.F.R. § 2.309(c)(1). Therefore, in light of his failure to address these factors, his contention should be rejected.

7. Shannon Rudolph

Ms. Rudolph fails to meet the contention pleading requirements of 10 C.F.R. § 2.309(f)(1) since she does not set forth with particularity the facts or expert opinions upon which her contentions are based. Ms. Rudolph queries whether the relatively higher rate of cancer on the Big Island as opposed to the rest of Hawaii is due to exposure to “airborne depleted uranium oxides.” Rudolph Petition at 2-3. Ms. Rudolph states that she has “read that burned or aerosolized uranium is easily inhaled or ingested and easily goes airborne with the wind to be resuspended again and again.” *Id.* at 5. Citing a personal experience in May 2007 with other residents using radiation monitors, she believes that depleted uranium is being carried by the wind off of the Pohakuloa Training Area. *Id.* at 4-6. Based on this, Ms. Rudolph argues that there needs to be independent air monitoring. *Id.* at 3. Ms. Rudolph

also claims that there have been reports of tumors in sheep and goats near the Pohakuloa Training Area. *Id.* at 5.

Ms. Rudolph provides no basis for her belief that increased cancer rates are due to exposure to depleted uranium or that the supposed tumors in sheep and goats are due to exposure to depleted uranium. She provides no corroboration for those beliefs. Likewise, she gives no factual argument or expert opinion regarding the need for permanent independent air monitoring at the PTA. Citing to no portion of the Application, Ms. Rudolph fails to raise a genuine dispute with the Applicant. For these reasons, Ms. Rudolph's proposed contentions should be rejected.

Further, Ms. Rudolph's request for hearing is untimely. Ms. Rudolph did not submit her request for hearing until October 23, 2009, and Ms. Rudolph was never granted an extension of time beyond the October 13, 2009 deadline. Ms. Rudolph makes no attempt to establish that (1) the information upon which she relies to formulate her contentions was not previously available at the time by which initial petitions were due in this proceeding and, further, that, (2) such information is materially different from information that was available at the time by which initial petitions were due. Absent such discussion, her contentions cannot be considered "timely" pursuant to 10 C.F.R. § 2.309(f)(2). Ms. Rudolph fails to address the factors of 10 C.F.R. § 2.309(c)(1). In light of her failure to address these factors, her contentions should be rejected.

8. Other Petitioners

The petitions submitted by Ms. Durbin, Mr. Cole, Ms. Laing, Mr. Swerdlow, Ms. Andrews, Mr. Schlesinger, Mr. Sacher, Ms. Lee, Mr. Galbavy, Ms. Cronrod, Mr. Shooltz, Ms. Raphael, Mr. Nickerson, Mr. Freigang, Ms. Laxton, Mr. Levey, all raise the same matters: independent monitoring, a complete EIS, a formal hearing, and decommissioning. As such, all fail for the same reasons. None satisfy the factors of 10 C.F.R. § 2.309(f)(1). All of these

petitioners fail to allege with specificity the issues they intend to raise. They offer no explanation or basis for their contentions. They provide no information to assess whether the contentions are within the scope of this proceeding or relate to a material finding the NRC must make. Citing to no portion of the Application, they do not demonstrate that they have a genuine dispute with the Applicant as to the issues raised. Commission practice does not “permit ‘notice pleading’” and, therefore, the Commission does not permit the “filing of vague, unparticularized contention[s],’ unsupported by affidavit, expert, or documentary support.” *Seabrook*, CLI-99-6, 49 NRC at 219 (*quoting Calvert Cliffs*, CLI-98-25, 48 NRC at 349). A petitioner may not rely on mere speculation nor bare assertions as support for the admission of a proffered contention. See *Fansteel*, CLI-03-13, 58 NRC at 203. Therefore, the Commission should reject the contentions offered in these petitions.

Moreover, none of these petitions were filed by the October 13 deadline. None establish that (1) the information upon which they rely to formulate their contentions was not previously available at the time by which initial petitions were due in this proceeding and, further, that, (2) such information is materially different from information that was available at the time by which initial petitions were due. Absent such discussion, none of their contentions can be considered “timely” pursuant to 10 C.F.R. § 2.309(f)(2). All fail to address the factors of 10 C.F.R. § 2.309(c)(1). The Commission has summarily dismissed a petitioner’s filing for failure to address the factors for admission of nontimely contentions. See *e.g.*, *Millstone*, CLI-05-24, 62 NRC at 564 (*citing Private Fuel Storage, LLC*, CLI-00-02, 51 NRC at 79; *State of New Jersey*, CLI-93-25, 38 NRC at 296). As such, in light of his failure to address these factors, all of their contentions should be rejected.

III. Request for an Exemption from E-Filing

Ms. Harden requested an exemption from the E-filing requirement because she accesses the internet through a dial-up connection, has been unable to download the

required software, has been unable to obtain her digital certificate, and does not have easy access to PDF conversion software. The Staff does not oppose this request for an exemption from the E-filing requirement, provided that the other participants can benefit from the convenience and cost-savings of E-filing. Thus, the Staff does not oppose a process whereby Ms. Harden, Mr. Harp and Mr. Albertini would file their documents with the presiding officer and other participants via e-mail in Word format. The presiding officer and other participants would file through the e-filing system, and in addition, would also e-mail the filing to Ms. Harden, Mr. Harp and Mr. Albertini directly.

Messers Harp and Albertini, in their hearing requests, wrote that they wish to join Ms. Harden's request for an exemption from E-filing. Any exemption request, however, must be accompanied by a showing of "good cause for not submitting documents electronically." Neither of these petitions attempted to address this standard, thus neither request should be granted.

CONCLUSION

None of the petitioners demonstrated standing to intervene in this proceeding. None of the petitioners submitted an admissible contention. Accordingly, the petitioners' hearing requests must be denied

Executed in Accord with 10 CFR 2.304(d)

Brett Michael Patrick Klukan
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop: O15-D21
Washington, D.C. 20555-0001
(301) 415-3629
Brett.Klukan@nrc.gov

Dated at Rockville, Maryland
this 6th day of November, 2009

Attachment 1

I.

Reply 11/9/09

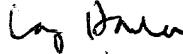
PO Box 10265
Hilo, Hawai'i 96721
October 9, 2009

U.S. Nuclear Regulatory Commission (NRC)
Office of the Secretary of the Commission
Rulemakings & Adjudications Staff
Mail Stop O-16C1
Washington, DC 20555-0001

Dear NRC staff,

Enclosed are my REQUEST FOR EXEMPTION FROM ELECTRONIC FILING and REQUEST FOR EXTENSION OF TIME TO FILE A REQUEST FOR HEARING AND PETITION FOR INTERVENTION. Thank you for your attention to these requests.

Sincerely,



Cory Harden

cc.

Office of Commission Appellate Adjudication, NRC
Catherine Scott, Kimberly Sexton, and Brett Klukan at Office of the General Counsel, NRC
David Howlett, U.S. Army Installation Command, Arlington, VA
Jim Albertini, Malu Aina

REQUEST FOR EXEMPTION FROM ELECTRONIC FILING

I request an exemption, under 10 CFR 2.302 paragraph (g) (3), from electronic formatting and electronic transmission, because when I tried to do this while representing Sierra Club, it became extremely time-consuming.

- I tried to download the format viewer, but screen messages said it would take 4 to 8 hours on my dial-up connection. The connection sometimes fails if a telephone call comes in, or if I don't tap a key every 10 minutes. Then I have to start over. NRC technical support said they would bring this up at staff meeting and get back to me with possible solutions, but I haven't heard back yet.
- To submit documents in the required PDF format, I would have to drive 30 miles round trip to a computer service store.
- I spent an hour or so on the computer and with NRC technical support trying to get a digital ID, but it still didn't come in correctly.

.....
October 9, 2009

In the matter of)	
)	
U.S. ARMY INSTALLATION COMMAND)	Docket No. 40-9083
)	
(Depleted Uranium at Pohakuloa Training)	
Area & Schofield Barracks, Hawai'i))	

CORY HARDEN'S REQUEST FOR EXTENSION OF TIME TO FILE
A REQUEST FOR HEARING AND PETITION FOR INTERVENTION

INTRODUCTION

I hereby request an extension of time for the public to file a request for hearing and petition for intervention until 60 days after certain documents are made available on ADAMS (Agency-Wide Document Access and Management System on NRC's website.)

DISCUSSION

"The U.S. Army Installation Command submitted to the NRC a license application ("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 Hawaii. On August 13, 2009, a notice of opportunity to request a hearing or petition for intervention was published in the Federal Register, setting the deadline for such as October 13, 2009." [copied from October 1, 2009 NRC staff response to Sierra Club's motion for extension of time to file comments, a request for hearing and petition for intervention] [1]

FURTHER DISCUSSION RE. REQUIREMENTS LISTED IN AUGUST 12, 2009 FEDERAL REGISTER NOTICE NRC-2009-0352:Docket No. 40-9083**

1. The name, address, and telephone number of the requester;
Cory Harden, PO Box 10265, Hilo, Hawai'i 96721 808-968-8965 mh@interpac.net
I am filing as an individual, not representing Sierra Club, though I include information from occasions when I was representing Sierra Club.
2. The nature of the requester's right under the Act to be made a party to the proceeding;
Residency on Hawai'i Island, where some of the depleted uranium (DU) spotting rounds were used

3. The nature and extent of the requester's property, financial or other interest in the proceeding;
See #2

4. The possible effect of any decision or order that may be issued in the proceeding on the requester's interest;

If Hawai'i Island residents have fuller knowledge about when, where, and how the spotting rounds were used, they will be able to make more meaningful comments to NRC on its decisions about conditions to write into the Army DU license

5. The circumstances establishing that the request for a hearing is timely in accordance with 10 CFR 2.309(b).

This request is being mailed by the due date of October 13, 2009.

1. Provide a specific statement of the issue of law or fact to be raised or controverted;

I request that the 60-day deadline to file a request for hearing and petition for intervention be re-set after two documents are made publicly available on ADAMS (Agency-Wide Document Access and Management System on NRC's website.)

The documents are (1) the Archives Search Report (ASR) and (2) an official Army document stating the decision not to do a Human Health Risk Assessment (HHRA) for Pohakuloa, and giving the scientific basis for this decision.

Since these two documents are not readily available alongside related documents on ADAMS, the public is prevented from making informed decisions about filing requests for hearing and petitions for intervention, and from making informed comments on the application.

2. Provide a brief explanation of the basis for the contention;

Re. ASR

A. The ASR may help resolve contradictory statements about the number of spotting rounds at Pohakuloa and in Hawai'i. If the number is 2050 at Pohakuloa alone, not just 714 statewide, very different conditions may eventually be written into the Army DU license. Here are the contradictory statements:

Army

"U.S. Army Colonel Killian...said the types of exercises conducted at PTA (Pohakuloa Training Area) would require the firing of at least 2,050...spotting rounds." [Depleted Uranium at Pohakuloa, West Hawai'i Today, 2-4-09] [2]

'The 2,050 figure was based on old training manuals, which specify how many rounds soldiers had to shoot to be qualified on the weapon system.' [from my notes--re. Col. Killian's presentation to Hawai'i County Council 2-3-09 and conversations with him that day] [3]

"The Army agrees it is theoretically possible to have fired up to 2,520 rounds on training ranges in Hawaii. This includes both Schofield and Pohakuloa ranges. However, shipping records have accounted for all, but 20 of the rounds. Therefore, it is reasonable to assume that only a total of 714 rounds were fired in Hawaii. (Note: the below extract from the Archives Search Report includes a plausible explanation for the reason that fewer rounds may have been fired in Hawaii.)

'Total rounds verified shipped from Oahu from Lake City Ordnance Plant were 714 rounds on 27 April 1962. Notice this date coincides with the first weapons arriving at Oahu in the spring of 1962. As discussed in Section 8.1, this original shipping quantity is not close to the "worst case scenario" estimate of usage for six years with 14 weapons (2,520 rounds.) This shipping quantity averages only 8.5 rounds fired per year per weapon. It is highly probable that additional stocks of the Cartridge, 20 mm Spotting M101 were order from one of the Ordnance

Depots (Letterkenny or Pueblo) during the six active years of the Davy Crockett Weapon System in Hawaii.' "

["Sierra Club's concerns--1" in letter from Army to U.S. Rep. Mazie Hirono, dated about May 20, 2009] [4]

Sierra Club

"I have estimated that up to 120 to 2,000 spotting rounds were fired on the PTA. [Pohakuloa Training Area]...I would use the upper end of this range..." [Number of Spotting Rounds section in "Independent Review of Pohakuloa: Depleted Uranium from the Davey [sic] Crockett Weapon System" by Peter Strauss] [5]

"An environmental consultant [Peter Strauss, hired by Sierra Club] estimated there may be as many as 2,000 depleted uranium rounds at Pohakuloa Training Area...The consultant's analysis was based on an Army report estimating that between 120 and 400 firing pistons are scattered around impact ranges at PTA...Each piston would have fired up to five of the DU rounds, for a total of between 600 and 2,000 rounds fired, Strauss said."

[Sierra Club consultant disputes Army's DU tally, Hawai'i Tribune-Herald, 8-26-08] [6]

B. The ASR seems to provide a basis for determining the number of spotting rounds and where they were shipped worldwide. ["Army Archive Search Report Results" on "Accounting of M101 Spotting Rounds" page in "Hawai'i Island Depleted Uranium Update" handout that accompanied Army Colonel Killian's presentation to Hawai'i County Council, February 3, 2009] [7]

C. A title that seems to refer to the ASR [8] appeared on the Army DU website about October 7, 2009, but when I try to download the report I get an error message. [9]

D. I made many attempts--some listed below--to obtain the ASR through Sierra Club.

In December 2008, I filed a Freedom of Information Act Request [10] for the ASR with the Army.

In May 2009 I phoned Anna Tarrant with the Army Directorate of Human Resource in Honolulu.

On July 7, 2009, at a meeting of the Pohakuloa Citizen Advisory Group which I attended by phone, I asked Commander Warline Richardson to obtain the report, and she said she would try.

At NRC's August 27, 2009 meeting in Hilo, Greg Kompf, who I believe is a radiation specialist based in Washington, D.C., promised to send me the report.

On September 22, 2008, John Hayes of NRC e-mailed me that Sierra Club must contact Office of the Secretary re. my request to extend the deadline for 60 days after the ASR appeared on ADAMS. [1--see Attachment 1]

On September 26, 2009, Addison Davis, Deputy Assistant Secretary of the Army, Environment, Safety, and Occupational Health, e-mailed that he would try to get the report. [11]

Re. Pohakuloa HHRA

The Army said they would do a full HHRA, then said they'd do a modified HHRA, then said they wouldn't do any HHRA. But I have not seen an official explanation of the scientific basis for this change in any documents on ADAMS or the Army DU website.

A. Reference to a full HHRA

"Plan--archive research...scoping...characterization survey...health risk assessment published" [from my notes on the Army presentation at the Kawaihae Local Resource Council meeting November 18, 2007, Waimea, Hawai'i Island] [12]

B. Reference to a modified HHRA

"Modified Risk Assessment anticipated by APR 09"

[from "Project Current Status" page of "Hawai'i Island Depleted Uranium Update" handout that accompanied Army Colonel Killian's presentation to Hawai'i County Council, February 3, 2009] [13]

C. Reference to no HHRA

"Greg Kompf of the Army...indicated there is not going to be a HHRA report performed because of the limited amount of DU identified at Pohakuloa." [9-9-09 e-mail to me from John Hayes] [14]

"Pohakuloa Human Health Risk Assessment- It is my understanding from the Department of the Army that no health report would be generated which would address this topic because of lack of depleted uranium data from Pohakuloa. This information was also presented during our meeting with the Army the week of August 24, 2009. The report is not part of the license application." [1-- Attachment 3--affidavit of John Hayes]

3. Demonstrate that the issue raised in the contention is within the scope of the proceeding;
See #2

4. Demonstrate that the issue raised in the contention is material to the findings that the NRC must make to support the action that is involved in the proceeding;
See #2

5. Provide a concise statement of the alleged facts or expert opinions which support the requester's/petitioner's position on the issue and on which the requester/petitioner intends to rely to support its position on the issue;
See #2

6. Provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. This information must include references to specific portions of the application that the requester/petitioner disputes and the supporting reasons for each dispute, or, if the requester/petitioner believes the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the requester's/ petitioner's belief.
See #2

October 1, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)	
)	
U.S. ARMY INSTALLATION COMMAND)	Docket No. 40-9083
)	
(Depleted Uranium at Pohakuloa Training)	
Area & Schofield Barracks, Hawai'i))	

NRC STAFF'S RESPONSE TO SIERRA CLUB'S
MOTION FOR EXTENSION OF TIME TO FILE COMMENTS,
A REQUEST FOR HEARING AND PETITION FOR INTERVENTION

INTRODUCTION

Pursuant to 10 C.F.R. § 2.232(c), the NRC staff ("Staff") hereby responds to the motion for extension of time to file comments, a request for hearing and petition for intervention ("Motion") tendered by Ms. Cory Harden on behalf of the Moku Loa Group of the Sierra Club ("Sierra Club").¹ For the reasons set forth below, the Motion should be denied in so far as it requests an extension of time until 60 days after certain documents are made publicly available. The Staff, however, does not oppose a two week extension of time, until October 27, 2009, for the Sierra Club to file a request for hearing or petition for intervention.

DISCUSSION

The U.S. Army Installation Command submitted to the NRC a license application ("Application") (ADAMS Accession No. ML090070095) requesting authorization to possess depleted uranium at two sites in Hawaii, Schofield Barracks on Oahu and Pohakuloa Training

¹ The Motion is enclosed as Attachment 1. By email dated September 27, 2009 (Attachment 2), Mr. Jim Albertini requested an extension of time for the same reasons as expressed in the Motion. Mr. Albertini's request is identical to that of the Sierra Club. The Staff does not oppose a two week extension of time for Mr. Albertini to file a request for hearing or petition for intervention.

Area on the Big Island of Hawaii. On August 13, 2009, a notice of opportunity to request a hearing or petition for intervention was published in the Federal Register, setting the deadline for such as October 13, 2009.² In its Motion, the Sierra Club requests that the deadline for filing comments and for filing a request for hearing and petition for intervention be stayed until 60 days after three specified reports are made publicly-available on ADAMS.³ The reports are listed by the Sierra Club as the "Archives Search Report," the "Pohakuloa Characterization Report" and the "Pohakuloa Human Health Risk Assessment."⁴ According to the Sierra Club, because these reports are not publicly available in ADAMS, "the public cannot incorporate information from the reports into decisions on whether to file for hearing..."⁵

The specified reports are not part of the Application.⁶ Based on information available to the Staff, the first report, the "Archives Search Report," exists; however, the report was not received as part of the Application, nor is it currently in the possession of the NRC.⁷ While the Staff is in possession the second report, the "Pohakuloa Characterization Report," this report was not received by the NRC as part of the Application.⁸ The Staff understands that with respect to the third report, the "Pohakuloa Human Health Risk Assessment," the Army Installation Command does not intend to prepare such a report and, as such, the report is

² Notice of License Application Request of U.S. Army Installation Command for Schofield Barracks, Oahu, HI and Pohakuloa Training Area, Island of Hawaii, HI; and Notice of Opportunity for Hearing, 74 Fed. Reg. 40,855 (Aug. 13, 2009).

³ Motion at 2.

⁴ *Id.*

⁵ *Id.*

⁶ Affidavit of John Hayes Executed on September 30, 2009 (Attachment 3).

⁷ *Id.*

⁸ *Id.* at 1-2.

not, nor will be, in existence.⁹

The Staff submits that the Sierra Club should not be granted an indefinite period of time to file its hearing request or petition for intervention until the documents it seeks become available to it. The Commission's adjudicatory procedures require that any person "who desires to participate as a party must file a written request for hearing and a specification of the contentions which the person seeks to have litigated in the hearing."¹⁰ Contentions must be "based on documents or other information available at the time the petition is to be filed..."¹¹ Therefore, the fact that the Sierra Club does not have access to the specified reports does not constitute a cognizable impediment to the filing of a request for hearing or petition for intervention pursuant to the Commission's adjudicatory procedures.¹² Furthermore, as two of the specified reports are not in the possession of the NRC and one of those reports does not exist, there is no way to know how long a deadline would need to be stayed. Thus, to the extent that the Motion seeks an extension of time following the public availability of certain documents, it should be denied.¹³

The Staff, however, does not oppose a two week extension of time, until October 27, 2009, for the Sierra Club to file a request for hearing or petition for intervention.

⁹ *Id.* at 2.

¹⁰ 10 C.F.R. § 2.309(a).

¹¹ *Id.* at § 2.309(f)(2).

¹² The Sierra Club, however, could be able to demonstrate the timeliness of a request for hearing or petition for intervention after the deadline for such has passed, if the specified reports, when made available, contain new information materially different from that previously available to the public and other required showings are made. *See id.*

¹³ The Federal Register notice of an opportunity for hearing did not establish a deadline for filing comments to the NRC. *See* Notice of Opportunity for Hearing, 74 Fed. Reg. at 40,855. In fact, comments will be accepted at any time and may be addressed to John Hayes, Project Manager, at John.Hayes@nrc.gov.

Executed in Accord with 10 CFR 2.304(d)

Brett Michael Patrick Klukan
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-15 D21
Washington, DC 20555-0001
(301) 415-3629
Brett.Klukan@nrc.gov

Dated at Rockville, Maryland
this 1st day of October, 2009

Attachment 1

From: Cory (Martha) Harden [mh@interpac.net]
Sent: Tuesday, September 22, 2009 2:35 PM
To: Docket, Hearing
Subject: extend due date for docket # 40-9083

To NRC Office of the Secretary,

We are requesting extension of the due date for docket # 40-9083 . Please see messages below.

Thank you,

Cory Harden
Sierra Club, Moku Loa group
Box 1137
Hilo, Hawai'i 96721
808 968 8965
mh@interpac.net

----- Original Message -----

From: ~~Hayes, John~~
To: Cory (Martha) Harden
Cc: Jim Albertini
Sent: Tuesday, September 22, 2009 8:53 AM
Subject: RE: request extending due date

Ms. Harden,

Thank you for your email of last week. A request for an extension to the date for filing a request for hearing needs to be submitted to the NRC's Office of the Secretary. That address is listed in the August 13, 2009 Federal Register Notice (FRN) on the proposed action involving the Army. A copy of the FRN is attached. I have no authority regarding such an extension.

Regards,

Jack

From: Cory (Martha) Harden [mailto:mh@interpac.net]
Sent: Friday, September 18, 2009 4:43 PM
To: Hayes, John
Subject: request extending due date

MEMO

TO Jack Hayes, Project Manager for Depleted Uranium (DU) in Hawai'i, Nuclear Regulatory Commission (NRC)

FROM Cory Harden, Sierra Club, Moku Loa group

Jack Hayes,

We are writing to request that you extend the October 13 due date for filing for hearing, and submitting comments, on the Army license for depleted uranium (DU) in Hawaii'i.

We ask for a due date of 60 days after these reports appear on ADAMS (Agency-Wide Document Access System on NRC's website)

Archives Search Report (ASR)

Pohakuloa Characterization Report

Pohakuloa Human Health Risk Assessment, or official document stating it will not be done and why

These reports are not on ADAMS yet, so the public cannot incorporate information from the reports into decisions on whether to file for hearing, and into comments which would help ensure that all relevant issues are considered.

Earlier, you e-mailed that the ASR will be available on the Army DU website. But we feel it should be on ADAMS because-

in nine months, the Army has not fulfilled a Sierra Club Freedom of Information Act (FOIA) Request for the ASR, though we followed up several times with the Army and U.S. Representative Mazie Hirono.

the ASR seems to provides a basis for assumptions in later reports (scoping, characterization, and human health risk assessment) about when, where and how the DU spotting rounds were used

Thank you for considering our request.

Cory Harden
Sierra Club, Moku Loa group
PO Box 1137
Hilo, Hawaii 96721
808-968-8965 mh@interpac.net

Attachment 2

From: Jim Albertini [mailto:JA@interpac.net]
Sent: Sunday, September 27, 2009 3:13 PM
To: Hayes, John
Cc: Cory (Martha) Harden; Hearing.docket@NRC.Gov
Subject: Re: request extending due date

Mr. Hayes and Mr. NRC Secretary.

I am a citizen trying to protect the public health and safety of the people of Hawaii from U.S. military radiation contamination.

I am on record requesting a similar extension as Ms. Harden for the reasons she states below.

I re-read the Federal registry notice. Your legaleese is stacked against citizen involvement. I am a farmer in the rainforest of Hawaii with no access to high speed internet that is necessary to access documents (currently not available at all) and file for electronic hearings. Your system does not provide for equal access to justice under the law, yet we the citizens are paying for this ridiculous electronic system to be used against us. Shame on you for being a party to such injustice.

Jim Albertini, president

Malu 'Aina Center for Non-violent Education & Action

P.O.Box AB

Kurtistown, Hawai'i 96760

phone: 808-966-7622

email: JA@interpac.net

Visit us on the web at: www.malu-aina.org

Attachment 3

October 1, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)	
U.S. ARMY INSTALLATION COMMAND)	Docket No. 40-9083
(Depleted Uranium at Pohakuloa Training Area & Schofield Barracks, Hawai'i))	

AFFIDAVIT OF JOHN HAYES

I, John Hayes, do hereby state as follows:

1. I am employed as a Senior Project Manager in the Materials Decommissioning Branch in the Nuclear Regulatory Commission's ("NRC") Office of Federal and State Materials and Environmental Management Programs. I serve as the Project Manager responsible for the review of the U. S. Department of the Army's request for a possession-only license for depleted uranium at the Schofield Barracks and the Pohakuloa Training Area sites.

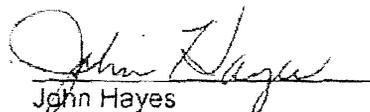
2. Archives Search Report (ASR) – I was previously told by a representative of the Army that such a document was to appear on the Army website, <http://www.imcom.pac.army.mil/du/Reports.htm>. As of October 1, 2009, this document is not on the Army's website and the NRC has not received such document. The report is not part of the license application.

3. Pohakuloa Characterization Report - noted as the Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys , The Big Island (Hawaii), Hawaii, July 24, 2009. This report was provided to the NRC during the week of August 24, 2009. Problems arose with placing this document in ADAMS. The Army's CD did not include any of the Appendices'

information. The staff is addressing this issue. While this report is not part of the license application, it is likely that we will utilize the information in the report in our review of the application.

4. Pohakuloa Human Health Risk Assessment— It is my understanding from the Department of the Army that no health report would be generated which would address this topic because of lack of depleted uranium data from Pohakuloa. This information was also presented during our meeting with the Army the week of August 24, 2009. The report is not part of the license application.

5. I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.


John Hayes

Executed in Rockville, MD
this 1st day of October, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
U.S. ARMY INSTALLATION COMMAND) Docket No. 40-9083
)
(Depleted Uranium at Pohakuloa Training)
Area & Schofield Barracks, Hawai'i))

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney enters an appearance in the above-captioned matter. In accordance with 10 C.F.R. § 2.314(b), the following information is provided:

Name: Brett Michael Patrick Klukan
Address: U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop: O-15 D-21
Washington, D.C. 20555
Telephone Number: (301) 415-3629
E-mail Address: Brett.Klukan@nrc.gov
Facsimile Number: (301) 415-3725
Admissions: Commonwealth of Pennsylvania
Name of Party: NRC Staff

Executed in Accord with 10 CFR 2.304(d)

Brett Michael Patrick Klukan
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-15 D21
Washington, DC 20555-0001
(301) 415-3629
Brett.Klukan@nrc.gov

Dated at Rockville, Maryland
This 1st day of October, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
U.S. ARMY INSTALLATION COMMAND) Docket No. 40-9083
)
(Depleted Uranium at Pohakuloa Training)
Area & Schofield Barracks, Hawai'i))

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney enters an appearance in the above-captioned matter. In accordance with 10 C.F.R. § 2.314(b), the following information is provided:

Name: Brett Michael Patrick Klukan
Address: U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop: O-15 D-21
Washington, D.C. 20555
Telephone Number: (301) 415-3629
E-mail Address: Brett.Klukan@nrc.gov
Facsimile Number: (301) 415-3725
Admissions: Commonwealth of Pennsylvania
Name of Party: NRC Staff

Executed in Accord with 10 CFR 2.304(d)

Brett Michael Patrick Klukan
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-15 D21
Washington, DC 20555-0001
(301) 415-3629
Brett.Klukan@nrc.gov

Dated at Rockville, Maryland
This 1st day of October, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)	
)	
U.S. ARMY INSTALLATION COMMAND)	Docket No. 40-9083
)	
(Depleted Uranium at Pohakuloa Training)	
Area & Schofield Barracks, Hawai'i))	

CERTIFICATE OF SERVICE

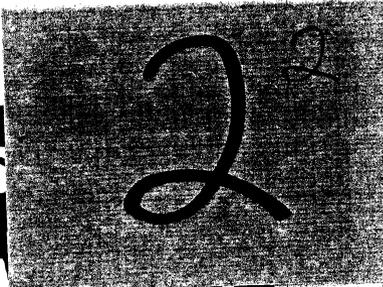
I hereby certify that copies of the foregoing "NRC STAFF'S RESPONSE TO SIERRA CLUB'S MOTION FOR EXTENSION OF TIME TO FILE COMMENTS, A REQUEST FOR HEARING AND PETITION FOR INTERVENTION" in the above captioned proceeding have been served via the Electronic Information Exchange ("EIE") this 1st day of October 2009, which to the best of my knowledge resulted in transmittal of the foregoing to those on the EIE Service List for the above captioned proceeding.

Executed in Accord with 10 CFR 2.304(d)

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PAGE 1B

'Mother' of women suicide
bombers captured

PAGE 3A

West Hawaii Today

WEDNESDAY, FEBRUARY 4, 2009

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50¢

Depleted uranium at Pohakuloa

Army: No threat, more rounds may have been fired

BY JIM QUIRK
WEST HAWAII TODAY
jquirk@westhawaii.com

HILO — More ammunition containing depleted uranium may have been fired at Pohakuloa Training Area than originally thought, but military officials insist there is still no "imminent or immediate" radioactive threat to human health.

U.S. Army Col. Howard Killian met with the Hawaii County Council in a Tuesday morning committee meeting — and later with the media at the Hilo Hawaiian Hotel — to provide an update on the military's efforts to determine depleted uranium levels at PTA.

Although records show 714 spotting rounds used in Davy Crockett weapons systems were shipped to the state in the 1960s, Killian said

the types of exercises conducted at PTA would require the firing of at least 2,050 such spotting rounds.

However, the Army has been unable to find records that verify 2,050 spotting rounds containing depleted uranium were brought to the Big Island, he said.

The Army does know that of the more than 70,000 specific spotting rounds manufactured, more than 34,000 were shipped directly to

military installations and 44,000 were demilitarized in the 1970s. Of that total more than 40,000 were shipped to depots, Killian said.

The Army has been unable to determine where spotting rounds sent to depots eventually ended up, he said.

Some residents have expressed concerns since 2006, when the Army at PTA discovered radioactive materials that were remnants

of the spotting rounds fired in the 1960s.

The concerns prompted the council last year to pass a resolution to halt live firing exercises until it is known whether depleted uranium is present at the site.

The Army, however, has not stopped exercises.

Residents who testified Tuesday

► SEE PTA PAGE 4A

► SALARIES: Lingle has proposed bills that would halt future raises

CONTINUED FROM PAGE 1A

— on Jan. 1. It was their first raise since 2005, and they hadn't seen an increase in 12 years before that, noted Speaker of the House Calvin Say.

Gov. Linda Lingle received two 5 percent raises worth \$10,480 to boost her pay to \$123,480 on July 1. Judges' pay has jumped more than \$30,000 over the last three years, and they now make at least \$148,548.

All of the raises kicked in as a result of actions by a Salary Commission with no legislative fingerprints and little oversight.

"We all know we have to do what we have to do. It's anticipated right now that the pay raises will probably play a role in the balancing of the budget," said Senate President Colleen Hanabusa, D-Nanakuli-Makua. "It's still up in the air, but I think that there's probably an acceptance that this is where we're going to go."

Both Say and Hanabusa agree that any legislation reducing planned pay raises would only influence future pay raises. They say any law limiting pay would affect all

lawmakers pass a law preventing them.

Voters approved the Salary Commission idea during the 2006 elections. It was meant to prevent legislators from having to vote on their own salaries. But they'll have to cast exactly that kind of vote if salary freeze legislation moves forward at the Capitol.

The Salary Commission had seven members: two appointed by Say, two by Hanabusa, two by Lingle and one by Chief Justice Ronald Moon.

Lingle also has proposed bills to the Legislature that would stop future pay raises from taking effect, but she doesn't want any political drama.

"The bottom line here is there's going to be shared sacrifice," Lingle said in a news conference last month. "My proposal is not to put them in a corner, or to box them in. They'll deal with it in the best way they can, and I'll leave that to them to decide. I just want to be clear that we need to work together throughout this session, and that means not nitpicking and not squabbling."

Unless lawmakers suspend the salary increases, addi-

► PTA: Air analysis will be provided monthly

CONTINUED FROM PAGE 1A

expressed concerns that the Army has not been completely truthful about depleted uranium levels at PTA. One resident held up a sign outside the Ben Franklin building where the meeting took place that read, "radiation cover-up."

Killian, however, said there is no cover-up and the military plans to release all of its test results to the public sometime this spring.

The Army conducted a survey of the area where depleted uranium may exist late last year, but that report is still being finalized, he said.

Also, the Army, working in conjunction with the state Department of Health, intends to spend \$150,000

to set up several air sampling systems at PTA and in Waikoloa that will monitor the air over the course of a year to determine the presence of depleted uranium, Killian said.

Reports on the air analysis will be provided monthly, he said.

Still, some residents do not approve of how the military is handling the situation.

Jim Albertini, of Kurtistown, said that because the military has failed to honor the resolution approved by the council last year, the council should vote on a bill that urges the state to cancel the Army's lease to use the PTA site.

Sierra Club member Cory Hardin said she doesn't understand how the Army can conclude there is no radiation danger when the

studies are not completed.

Howard Sugai, chief public affairs officer for the Army's Pacific region, said later the reason for that is "because of what we know about depleted uranium" and that the Army would have already detected it.

South Kona Councilwoman Brenda Ford and Puna Councilwoman Emily Naeole expressed concerns that the Army has not invited Maui resident Dr. Lorrin Pang, a former Army doctor and World Health Organization consultant, to serve on a community advisory council formed to study the situation.

Pang is perhaps the most noted of the scientists to express concerns about depleted uranium at PTA, and some residents and county officials apparently

would feel more comfortable if he were to serve on the Army's advisory council.

Army officials said Tuesday Pang was excluded from the advisory council because he is not a Big Island resident, but that his inclusion will be considered.

Those interested in more information can find it on the Internet at www.imcom.pac.army.mil/du/.

In other business Tuesday, council committees voted unanimously in favor of confirming two more appointments to Mayor Billy Kenoi's cabinet, including Lono Tyson as Environmental Management director and Bob Fitzgerald as Parks and Recreation Department director.

► IRAN: Satellite designed to circle earth 15 times in 24 hours

CONTINUED FROM PAGE 1A

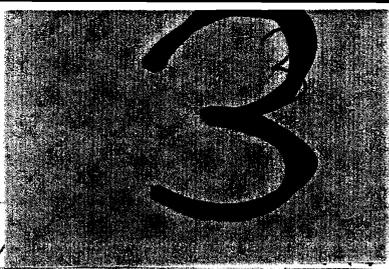
carrying the satellite at an unidentified location in Iran.

Center for Strategic and International Studies in Washington.

White House spokesman Robert Gibbs condemned the launch, saying, "This

from the U.S., Russia, Britain, France, Germany and China were set to meet Wednesday near Frankfurt to talk about Iran's nuclear program. The group has

and had made contact with ground stations, though not all of its functions were active yet. He said Iran would now seek to increase the ability of its satellite-



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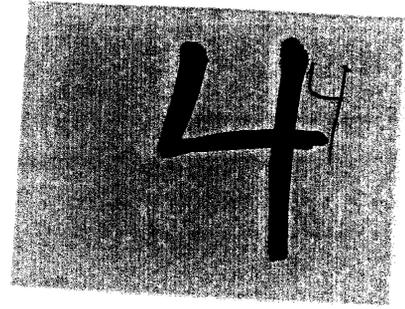
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In response to your
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Office of Congresswoman Mazie K. Hirono

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she worked it out July 20, 2009*

5-20-09

Copy

On February 20, 2009, the Sierra Club, Moku Loa Group requested Congressional assistance to address concerns with the Nuclear Regulatory Commission's (NRC) plans to issue the Army a license for depleted uranium (DU) for the Pohakuloa Training Area. The Sierra Club expressed the below concerns and requested Congressional support of its recommendations. The Army's responses to each concern and recommendation are provided below.

Sierra Club's concerns:

1 - There may be 2,000 DU spotting rounds at Pohakuloa alone--many times the original estimate of 700 statewide. Both the Army and a Sierra Club consultant, using different data sets, came up with the same figure.

"U.S. Army Colonel Killian...said the types of exercises conducted at PTA (Pohakuloa Training Area) would require the firing of at least 2,050...spotting rounds." [Depleted Uranium at Pohakuloa, West Hawaii Today, 2-4-09]

The 2,050 figure was based on old training manuals, which specify how many rounds soldiers had to shoot to be qualified on the weapon system. from my notes on Col. Killian's presentation to Hawaii County Council 2-3-09, and conversations with him that day

"An environmental consultant [Peter Strauss, hired by Sierra Club] estimated there may be as many as 2,000 depleted uranium rounds at Pohakuloa Training Area. The consultant's analysis was based on an Army report estimating that between 120 and 400 firing pistons are scattered around impact ranges at PTA. Each piston would have fired up to five of the DU rounds, for a total of between 600 and 2,000 rounds fired, Strauss said. "[Sierra Club consultant disputes Army's DU tally, Hawaii Tribune-Herald, 8-26-08]

Army Response. The Army agrees it is theoretically possible to have fired up to 2,520 rounds on training ranges in Hawaii. This includes both Schofield and Pohakuloa ranges. However, shipping records have accounted for all, but 20 of the rounds. Therefore, it is reasonable to assume that only a total of 714 rounds were fired in Hawaii. (Note: The below extract from the Archives Search Report includes a plausible explanation for the reason that fewer rounds may have been fired in Hawaii.)

*Response from U.S. Army
re: Corey Harder*

Total rounds verified shipped to Oahu from Lake City Ordnance Plant were 714 rounds on 27 April 1962. Notice this date coincides with the first weapons arriving at Oahu in the spring of 1962. As discussed in Section 8.1, this original shipping quantity is not close to the "worst case scenario" estimate of usage for six years with 14 weapons (2,520 rounds). This shipping quantity averages only 8.5 rounds fired per year per weapon. It is highly probable that additional stocks of the Cartridge, 20mm Spotting M101 were order from one of the Ordnance Depots (Letterkenny or Pueblo) during the six active years of the Davy Crockett Weapon System in Hawaii.³⁰

2 - DU may be dispersed from spotting rounds lying in the open. They may be hit by one-ton inert bombs dropping from three miles up, and by live-fire explosions. Some are fragmented. All are weathering.

Army Response. The process the Army used identified potential ranges where the M28 Davy Crockett could have been fired. These areas are outside both the bomb target and high explosives impact areas.

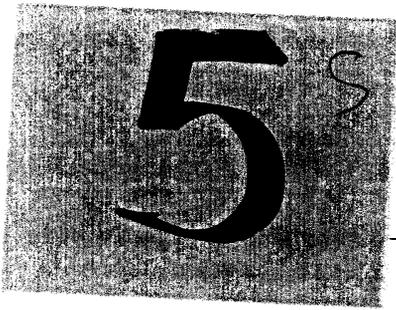
3 - No one knows exactly where all the spotting rounds are. Surveys for current studies covered fewer than 1000 acres of the 50,000-acre impact area. Decisions on where to survey were based on old and perhaps incomplete records. DU fallen into lava fissures is hidden from sight and from radiation detectors. So little data is available that the design of the risk assessment study had to be changed.

Army Response. The Army has conducted extensive research into Davy Crockett-related training and the use of the M101 Spotting Round in Hawaii. In addition, the Army has conducted both on-ground and an aerial survey of Pohakuloa impact area to identify and characterize areas where DU is present. The entire impact area was assessed, and the Army continues to look for ways to identify areas within the entire Pohakuloa Training Area at which the M101 may have been used. Army's current effort is to attempt to use satellite based imagery. The Army's characterization report will be published in the near future.

The terrain at Pohakuloa is rough with fissures. Given the low level radiation associated with DU from M101, this terrain feature is viewed as passively reducing the potential risk of both migration and exposure.

4 - Air sampling may be the wrong type, according to Dr. Lorrin Pang of Maui, a former Army doctor and advisor to the World Health Organization, and Mike Reimer, a Kona geologist.

Army Response. The Army considered the suggestions made by Dr. Reimer and Dr. Pang. In many cases, their suggestions were based on the fact they did not possess a full set of the reports being developed by the Army. These documents answer many of the questions they raised. In other cases, the Army has worked with the State to determine how best to address those areas not under the Army's jurisdiction.



PM STRAUSS & ASSOCIATES
Energy and Environmental Consulting

MEMORANDUM

TO: Cory Harden
FROM: Peter Strauss
DATE: August 1, 2008
SUBJ: **Independent Review of Pohakuloa Training Area (PTA): Depleted Uranium from the Davey Crockett Weapon System**

Introduction

In 2003, spotting rounds associated with the Davy Crockett Light Weapon were discovered during routine activities at Schofield Barracks. These spotting rounds contained depleted uranium (DU). Spotting Rounds were used in practice for targeting the weapon. DU was used because of its heavy weight and density, which was supposed to mimic the trajectory of the projectile. The practice projectile did not contain any DU.

The Davey Crockett Weapon system was a tactical nuclear weapon, designed for use in the field. Target training of the weapon took place in three ranges in Hawaii. The suspected ranges include Makua Military Reservation (MMR) on Oahu, Pohakuloa Training Area (PTA) on Hawaii, and Schofield Barracks Impact Area on Oahu. For MMR and PTA, an archive search was done. A Technical Memorandum summarizing the results of the survey was completed in April 2008. This report focuses on PTA.

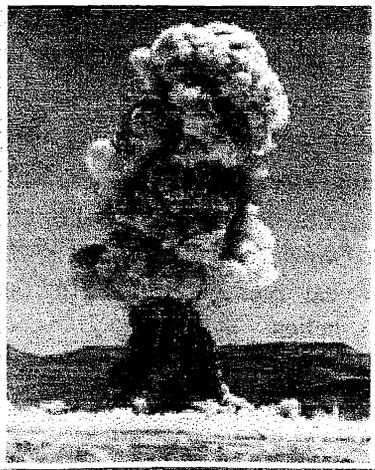
PTA is located on the island of Hawaii between Mauna Loa, Mauna Kea, and the Hualalai Volcanic Mountains. Its elevation ranges to approximately 6,800 feet to 9,000 feet. Groundwater occurrence on the island of Hawai'i is not well studied, although groundwater is used as the major drinking water source on the Island. Depth to groundwater is approximately 600 to 2,000 feet below ground surface (bgs). The 29-year average annual precipitation on the northern portion of the installation ranges from 10 to 16 inches.

The Davey Crockett Weapon System

This weapon system was based on recoilless rifle, a launcher similar to the shoulder-fired bazooka used during the Second World War. This weapon system, which was produced from 1960 until 1968, was used in training until 1968. It contained a warhead equivalent to 10 tons of TNT in destructive power. Only 80 warheads were produced during the first generation of the weapon. This was replaced by the W-48 warhead. The W-48 could be used in a more standard 155 mm howitzer. The W-48 increased destructive power of the earlier weapon by 7 fold. Together, almost 1,000 of these warheads were produced. Below is a picture of the earlier weapon, mounted on a truck.



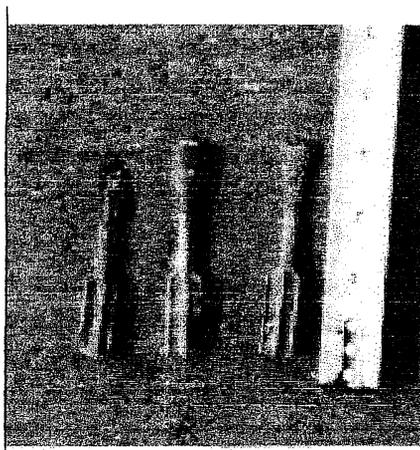
In 1962, this weapon system was tested in Nevada; a picture of that explosion is shown below.



<http://www.youtube.com/watch?v=khyZI3RK2IE>

The Davey Crockett used a piston to fire each practice round. It was like a booster: the piston is discharged from the weapon, and falls off the projectile, anywhere from 30 to 60 feet from the weapon. The practice rounds had a range of approximately 1,000 to 1,500 yards. The DU spotting rounds were used to help the weapon system operator to target the weapon accurately.

The spotting rounds were equipped with a small explosive charge to provide the operator of the weapon with information on the accuracy of weapon. If the operator did not hit the target with the spotting round, it would adjust the weapon and fire another spotting round. This would be repeated until the spotting round hit the target; after which the practice round was fired. Below is a photograph of the DU spotting rounds recovered from the Scofield Barracks.



U.S. Army Analysis

Analysis of the extent of DU on PTA was done by Cabrera for the Army. It first did an archival search. Because the weapon system was classified, this may have been more difficult than anticipated. Afterwards, a field scoping survey investigations conducted at PTA areas in August of 2007. The scoping survey was performed to assess the presence of DU fragments that might have originated from past training activities involving Davy Crockett. The survey's objectives were to identify whether the Davy Crockett was used at PTA, and if so, where and to what extent. It used historical data, aerial reconnaissance, radiation detection, and soil samples. If it was found that the Davy Crockett was used, readily visible DU was retrieved, where possible. Soil samples, were collected, if possible. Both of these latter tasks were made difficult because of the unexploded ordnance on the PTA. The Army's analysis

The aerial survey revealed the presence of pistons used to fire practice rounds. "A rough estimate showed there to be approximately 30-100 pistons at each of four locations."

The field teams made "rough" calculations based upon the location of the pistons, the operational range of the Davy Crockett system, and the likely firing points. Once these calculations were made, field personnel traveled to the likely impact areas. Field teams made two trips into the impact area. The field team consisted of three personnel, one of which was the UXO escort. Where terrain, vegetation, and safety concerns allowed access, radiological surveys to measure levels of alpha, beta, and gamma radiation were done. It is important to note that DU is a composite of different isotopes of uranium, but on the whole it is chiefly an alpha emitter. Alpha particles will usually not penetrate an ordinary sheet of paper or the outer layer of skin. Alpha radiation is more damaging than the same dose of beta or gamma radiation. Further, alpha particles are very heavy and very energetic compared to other common types of radiation. Uranium is also a weak gamma emitter. As such, in areas that have naturally occurring uranium,

it is very difficult to discern the presence of DU through standard radiation detection techniques.

During the first trip into the impact area, no locations were identified. During the second trip into the impact area, the team located one spotting round. The round was recovered intact. No soil samples were collected because the round was resting on basaltic rock.

Soil samples were collected at areas where sediment had accumulated from past runoff/erosion events. Ten soil samples were collected around the perimeter of the suspect impact areas at the PTA during the scoping survey. All of the samples were analyzed for isotopic uranium by alpha spectrometry. All of the results are consistent with naturally occurring concentrations of uranium. None of the results indicate the presence of depleted uranium. Soil samples collected around the perimeter of the site did not indicate the presence of DU, although the consultant (Cabrera) noted that the data "do not represent a statistically significant data set".

The results of the PTA scoping survey confirmed four areas were used to test fire the weapon, as described above. There was only one siting and recovery of a spotting round. The report noted that sampling of the impact areas would yield a more significant result. Furthermore, "Cabrera recommends that the Army conduct a characterization survey of the impact range, with an emphasis on defining the impact areas, eliminating areas where possible from further evaluation, and developing data appropriate to support a human health risk assessment."

Analysis of Cabrera Report

Number of Practice Rounds

Based on aerial reconnaissance, there is definitive evidence that the Davey Crockett weapon was used at PTA. Anywhere from 120 to 400 pistons were identified by air at PTA (30 to 100 in four locations). Because of the sparse vegetation on PTA, the Army is confident that this is probably the extent of practice firing at PTA, although it cannot be ruled out that other locations were missed. If this estimate is correct, up to 400 firings of the weapon took place. However, the number of times the weapon was fired based on aerial reconnaissance can only be roughly estimated by this method. If vegetation or terrain blocked visual recognition, one may have not been able to identify a firing location, or the presence of discharged pistons. To be conservative, I would use the upper end of this range. Note that the Davey Crockett practice rounds were made of plastic with an explosive charge. They would not leave a signature on the firing range after more than 50 years. (As noted above, I have confirmed that the practice rounds did not contain DU.)

Number of Spotting Rounds

I have estimated that up to 120 to 2,000 spotting rounds were fired on the PTA. The Army has stated anywhere from one to five spotting rounds were used for each practice round. Again, I would use the upper end of this range, because of the roughness of the estimates. The spotting round was made of a DU/molybdenum alloy, containing 92% DU, weighing 6.7 ounces each. Thus, if the maximum number were fired, 770 pounds of DU would be present on PTA. (If only one spotting round was fired for each practice round, there would be 46 pounds on PTA.)

Further evidence of the amount of spotting rounds was revealed in the archival survey. It was confirmed that 714 spotting rounds were shipped, containing 275 pounds of DU. In my opinion,

this is not definitive – merely it is indicative that at least one shipping document was located. Record searches of shipping papers dating back 50 years cannot be relied on as a definitive source – but may be used as a first step in understanding if there is a problem. It should be noted that the ITRC UXO Team stated that “It is critically important to recognize the potential limitations of many initial historical reviews. The historical research may not be exhaustive and may not have identified all potential munitions sites or hazards”. Furthermore it states that “Some initial historical reviews may be cursory reviews that are not intended to be an all-inclusive, exhaustive review of available historical records. Such reviews are usually intended to provide enough information to identify areas that require an immediate response or to prioritize the site for the next step in the munitions response.”

It should be noted that I personally have not performed an archival search, and have not reviewed the Archival Search by the US Army Corps of Engineers (2007), except for the summation in the Technical Memorandum. There is no information about the use of the Davey Crockett in the summation with regards to PTA, only that there were 12 firing ranges on PTA. However, the Army’s Radiation Health Specialist feels confident that only 714 spotting rounds were shipped.

Location of the DU

The Army attempted to get a better picture of the extent and location of DU on PTA by using radiation detectors in the field. Because DU is primarily an alpha emitter – it does not travel far and can be easily shielded, detection is very difficult. Ground surveys using radiation detectors suffer if one is not immediately above an item, so long as it is not shielded. As noted in the Army’s analysis, upon identifying the firing locations, estimates of four impact areas were made. Personnel traveled to the likely impact areas - however in the scoping survey, “the rough terrain limited accessibility to the suspected impact areas”. During one trip, no spotting rounds were identified; during a second trip one spotting round was identified. This highlights the limitations of scoping survey, but says little about the presence or extent of DU on the range.

Soil samples and laboratory analysis are the most reliable technique for identifying the presence and migration of DU. However, soil samples depend on locating the sites where the rounds have fallen. The samples that were taken were taken from the perimeter of the impact area, and are not reliable indicator of what is on the site. No other biological, air or groundwater analysis was done to more accurately identify the location of the DU.

All that being said, there is little reliable information about the location of DU on the four impact areas.

Health Threat of DU

The health effects of DU are controversial. The science surrounding DU’s effects on the body is rapidly expanding due in large part to the concerns that have arisen from its use in weapon systems deployed in the Gulf War and the 1999 NATO action in the former Yugoslavia and the health effects that are known as Gulf War Syndrome. DU is primarily dangerous to people when it gets inside the body: through ingestion or inhalation. Inside the body, DU creates risks both as a toxic heavy metal and as a radioactive material. Exposure to DU in water is regulated largely because uranium is known to be nephrotoxic (toxic to the kidneys).

But health effects can only present themselves if there are exposure pathways. Below I have

briefly described the issues involved with the two major potential pathways at PTA. One is through inhalation, the other through ingestion of drinking water.

Inhalation

Inhalation is of concern both in the short term and the long term. In the short term, it is probably more critical to workers in the field than residents of the island. It is unlikely, in my opinion, that small particles of DU would be inhaled unless the person was in the immediate vicinity. Wind-carried particles would not likely carry very far because of the weight of the DU. Because the spotting rounds were not vaporized, but broke into fragments, off-site inhalation would be unlikely. Homeowners nearby took air samples and had them analyzed, and there did not appear to be the presence of uranium above background. Although the samples were collected by the Homeowners Association and the chain of custody and quality control probably did not follow general procedures, I would have expected the same result.

However, should changes to the land-use take place, recreational or other users could be exposed to DU through this pathway.

Ingestion

Infiltration and percolation of surface water could potentially dissolve and transport chemicals deposited in surface soils to the subsurface, including DU. However, it is posited by the Army that most of the mass of chemical residues are expected to dissolve relatively slowly in water and would remain in shallow soils. A Professor at the University of Hawaii has stated that "the high binding affinity that U (Uranium) has for Fe (iron)-rich particulates found in Hawaii soils should help immobilize the U (i.e., DU particles) near the point of impact." I agree that geochemistry of the site makes it unlikely that DU is leaching from the surface to the groundwater. However, because of the sparseness of information about groundwater, and the fact that it supplies the majority of drinking water for the Island, long-term monitoring of groundwater, as recommended below, is important.

Recommendations

I have several recommendations for further action.

1. Ensure follow through on Cabrera's recommendations.

The Army is just beginning to follow up on the Cabrera recommendations (i.e., "the Army conduct a characterization survey of the impact range, with an emphasis on defining the impact areas, eliminating areas where possible from further evaluation, and developing data appropriate to support a human health risk assessment"). Greg Komb indicated that the Army is flying over the impact areas with radiation detection devices, using low-flying helicopters to detect radiation anomalies. In my opinion, it's unlikely that a helicopter would be able to distinguish readings from natural background. However, Greg Komb has stated that in flat terrain over the Scofield Barracks, he was able to discern the presence of DU. Regardless, aerial radiation detection would be gross, and in my opinion, I would not rely on it for evidence. Instead statistically significant soil samples analyzed by mass spectrometry and field radiation detection should be carried out, except where there are concerns about safety due to the

unexploded ordinance in the impact areas.

2. Establish Long-Term Monitoring

Long-term monitoring of soil and groundwater is essential to ensure that DU is not migrating through the environment. In particular, potable supplies of groundwater should be monitored. After any DU is found and cleared, then perimeter sampling of soil should be sufficient. I would recommend that the sampling be done annually, and after five years with no indication of DU, it may be adjusted to once every two years. Potable water supplies should be monitored annually. In addition, and as the Army intends, if there is any construction activity on PTA, soil samples and radiation detection should take place. If any DU is found, then a wider area should be surveyed.

3. Defining a Hazard

During my conversation with Greg Komb he stated that unless there were a hazard it would be unlikely that the Army would take active steps to remediate the area. I asked him what this meant, using the example that if he discovered 2,000 spotting rounds, would he consider this a hazard? The question was left unanswered. The Army needs to inform the public about how they would define a hazard that would lead to further action. From my review of munitions response documents, hazard assessment is based on a site-by-site analysis, and does not have strong regulatory guidance. Keep in mind, however, that probably the greatest hazard on PTA is from UXO.

Sources of Information

Phone with Howard Sugai (Indoor and Radiological Health Branch), Department of the Army: imcom-pacific-du@hawaii.army.mil, July 23, 2008

Phone with Greg Komb, Radiation Health and Safety Specialist, U.S. Army, July 28, 2008

Final Environmental Impact Statement (EIS) Army Transformation of the 2nd Brigade, 25th Infantry Division (Light), to a Stryker Brigade Combat Team (SBCT) May 2004.

Correspondence and Public Information Releases by the Waiki'i Homeowners Association

Literature Search of the Davey Crockett Weapon

Final Technical Memorandum: Depleted Uranium Scoping Investigations, Makua Military Reservation, Pohakuloa Training Area, Schofield Barracks Impact Area, Islands of Oahu and Hawaii, Prepared for Department of the Army, Cabrera Services, April 2008

Presentation Depleted Uranium Update Installation Management Command – Pacific COL Howard Killian, Deputy Region Director January 2008

Presentation of Kenneth H. Rubin, Ph.D., Professor and Chair of the Volcanology, Geochemistry and Petrology Division, Department of Geology and Geophysics, School of Ocean and Earth Science and Technology, University of Hawaii

Science for the Vulnerable Setting Radiation and Multiple Exposure Environmental Health Standards to Protect Those Most at Risk, Arjun Makhijani, Ph.D., Brice Smith, Ph.D., Michael C. Thorne, Ph.D., Chapter 8, October 19, 2006

Interstate Technology Regulatory Council (ITRC), Munitions Response Historical Records
Review, November 2003

HAWAII TRIBUNE HERALD Tue 8-26-08

Sierra Club consultant disputes Army's DU tally

By **BRET YAGER**
Tribune-Herald staff writer

An environmental consultant at Pohakuloa Training Area, but by Hawaii Island Chapter of Sierra nuclear reactors and environmental firing pistons are scattered around impact ranges at PTA.

The pistons helped lob the estimates there may be as many as 2,000 depleted uranium rounds used to arrive at that number. The consultant's analysis was based on an Army report estimating that between 120 and 400 firing pistons are scattered around impact ranges at PTA.

See **URANIUM** Page A8

URANIUM

From front page

training rounds from the 1960s-era Davy Crockett recoilless rifle during military exercises. The weapon was designed to launch a small nuclear bomb in a real war situation.

Each piston would have fired up to five of the DU rounds, for a total of between 600 and 2,000 rounds fired, Strauss said, noting that two Army officials had told him the pistons fired multiple spotting rounds per piston. But the Army on Monday questioned the number.

"Every time they fired the weapon, they would send one piston down-range," said Howard Sugai, public affairs officer with Army Installation Management Command for the Pacific Region. "The piston served sort of like a booster rocket, and it dropped off about 600 meters beyond the firing point. It's a one-

time deal because the piston is deeply embedded in the impact area, which is full of unexploded ordnance."

"(Strauss's report) didn't make sense to me, anyway," Sugai said. "I did think (the estimate) was rather high."

Army estimates of 120 to 400 pistons would equate to the same number of rounds containing DU.

Army officials say they believe 714 of the spotting rounds were shipped to Hawaii. But they don't know how much DU is contained at PTA and may not know even when an ongoing survey of the area is complete.

"I hope we will," Sugai said. "The challenge at PTA is that the DU may be buried deeply in those (fractured) lava fields."

The military has said it is committed to completing the survey but noted that a

thorough cleanup of fragments would be problematic because the terrain is made up of fractured lava rock. The area is also littered with small unexploded bombs.

While he understands the difficulty of cleaning up an area covered with unexploded ordnance, the Army should do its best, Strauss said.

"I suspect they should be monitoring it and retrieving as much as they can," Strauss said.

The Hawaii County Council passed a resolution in July urging the military to cease live-fire and bomb training at PTA until the DU has been cleaned up.

Strauss said the Army's estimate of 714 rounds is based on shipping documents half a century old. He cautioned that the archives search used to locate the documents may not have

revealed all the sources of DU, particularly since the weapon was classified and shrouded in secrecy.

But Sugai said the number is all the Army has to go on at the moment.

"For right now, we have to assume 714 is all we got," Sugai said.

Strauss said the toxic heavy metal can affect health if inhaled or swallowed, but inhalation of particles isn't likely "unless the person was standing in the immediate vicinity."

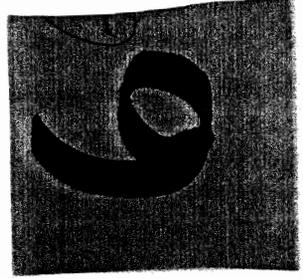
nor is it likely the material is getting into groundwater. But that could change if the land passes into other uses, he said.

Strauss recommended long-term air, soil and water testing at PTA.

E-mail Bret Yager at byager@hawaii.tribune-herald.com.

Setting the record straight

An Aug. 26 article on depleted uranium at Pohakuloa Training Area incorrectly reported that pistons found at Pohakuloa Training Area were used to fire spotting rounds containing radioactive depleted uranium. The DU spotting rounds were fired separately from the pistons. The pistons were used to launch a fake nuclear warhead. The 85-pound fake warhead, or "dummy round," contained high explosives and its exterior was made of aluminum and plastic. The Army issued five DU spotting rounds with each fake warhead, and the Army assumes that all five DU spotting rounds were fired during practices, according to Col. Howard Killian,





Accounting of M101 Spotting Rounds

- M101 spotting rounds manufactured and distributed: **75,318**
- M101 spotting rounds shipped directly to installations: **34,070**
- Number of rounds shipped to depots: **41,248** *— No receipt for 41,248*
- M101 spotting rounds demilitarized at the LCAAP during the 1970's: a maximum of **44,000**
- Number of M101 spotting rounds unaccounted for: **20** *Does JRC know you don't determine where the depots sent 41,248 - how that 20 was unaccounted*

- Notes:
- 1) Cannot account for rounds once shipped to installations or to depots.
 - 2) Cannot account for rounds demilitarized (i.e., which rounds were demilled).
 - 3) "Unaccounted" means receipt point is unknown.

Army Archive Search Report Results: Original documents located for the government purchased quantities of Cartridge, 20mm Spotting M101 were DD Forms 550. These were Ordnance Corp Ammunition Lot Records. When the entire lot was shipped off and the lot became "zeroed out" the form was pulled and filed. The form was annotated with carriers, transportation control numbers, and destinations. An analysis of each destination with quantities is shown in a spreadsheet.

Destination	Quantity of Cartridge 20mm Spotting M101
Aberdeen Proving Ground, MD	200
Fort Benning, GA	5,700
Fort Campbell, KY	681
Fort Hood, TX	4,038
Fort Knox, KY	3,956
Fort Lewis, WA	1,756
Fort Riley, KS	105
Frankford Arsenal, PA	50
Frankfurt, Germany	7,833
Hiroin, South Korea	1,440
Lake City Ordnance Plant, MO	45
Letcher Army Ordnance Depot, PA	17,183
Oahu, Hawaii	714
Pirmasens, Germany	3,384
Pueblo Ordnance Depot, CO	24,065
Ryukyu Island (Okinawa), Japan	103
San Jose, CA	45
Dive No. 10 3-20718-1, destination unknown	20
TOTAL	75,318

including: lung cancer, leukemia, lymphoma (Hodgkin and non-Hodgkin), bone cancer, renal cancer, bladder cancer, brain and other nervous system cancers, stomach cancer, prostatic cancer, testicular cancer, nonmalignant renal disease, neurologic effects, reproductive and developmental effects, cardiovascular effects, genotoxicity, hematologic effects, immunologic effects, and skeletal effects.

ASR Davey Crockett Hawaii

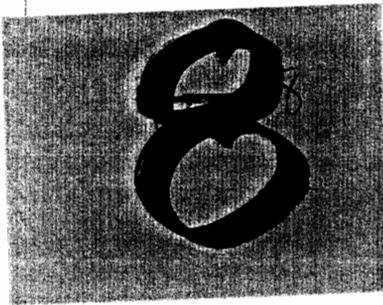
In November of 2006, the U.S. Army Joint Munitions Command (JMC) Safety/Radiation Waste Team tasked the U.S. Army Corps of Engineers (USACE), St. Louis District with this project. The project consisted of an archive search effort to collect data and information concerning the use of the Davy Crockett Light Weapon M28 on ranges at Schofield Barracks and associated training areas. This weapon system engaged the use of a 20mm cartridge for spotting of the training round. This Cartridge, 20mm Spotting M101 consisted of a body constructed of D-38 Uranium alloy (Uranium-238 Depleted Uranium).

Makua Flyover Tech Final

Cabrera Services Inc (CABRERA) was contracted by the U.S. Army Joint Munitions Command to perform confirmatory aerial radiation and visual surveys of potential Davy Crockett impact areas at the Makua Military Reservation (MMR), Hawaii (hereafter referred to as "MMR" or "the site"). And to the extent practical, conduct confirmatory ground based gamma walkover surveys (GWS) and soil sampling to correlate measurements taken during aerial surveys for the presence of DU. Due to potential presence of UXO/MEC, improved conventional munitions (ICM) and ground cover over the MMR range, only limited access for GWS and soil sampling was anticipated to be available.

PTA Flyover Tech Report Final

Cabrera Services Inc (CABRERA) was contracted by the U.S. Army Joint Munitions Command to perform confirmatory aerial radiation and visual surveys of potential Davy Crockett impact areas at the Makua Military Reservation (MMR), Hawaii (hereafter referred to as "MMR" or "the site"). And to the extent practical, conduct confirmatory



The page cannot be found

The page you are looking for might have been removed, had its name changed, or is temporarily unavailable.

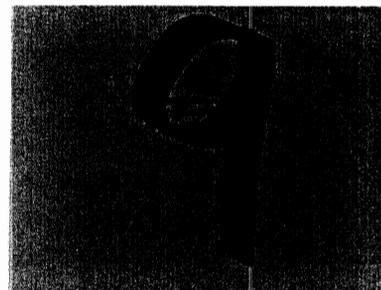
Please try the following:

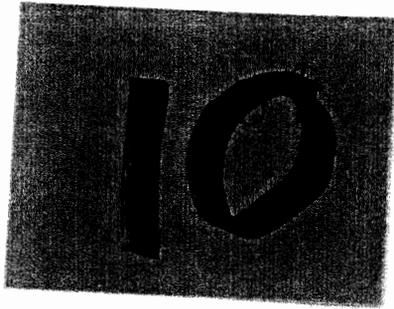
- Make sure that the Web site address displayed in the address bar of your browser is spelled and formatted correctly.
- If you reached this page by clicking a link, contact the Web site administrator to alert them that the link is incorrectly formatted.
- Click the [Back](#) button to try another link.

HTTP Error 404 - File or directory not found.
Internet Information Services (IIS)

Technical Information (for support personnel)

- Go to [Microsoft Product Support Services](#) and perform a title search for the words **HTTP** and **404**.
- Open **IIS Help**, which is accessible in IIS Manager (inetmgr), and search for topics titled **Web Site Setup**, **Common Administrative Tasks**, and **About Custom Error Messages**.





copy copy

December 13, 2008

Colonel Howard Killian
Army Installation Management Command-Pacific
132 Yamanaga St.
Fort Shafter, Hawai'i 96858

Aloha Colonel Killian,

Pursuant to the Freedom of Information Act ("FOIA"), 5 U.S.C. SS 552, Sierra Club, Moku Loa group requests a paper copy of the Archive Search Report on the Use of Cartridge, 20 mm Spotting M101 for Davy Crockett Light Weapon M28, Island of Oahu and Hawaii, USACE, St. Louis District, May 2007.

As provided by FOIA, we request a waiver of all search and copying fees. Sierra Club is a nonprofit organization working for protection of the environment. Sierra Club has no commercial interest in the documents requested, which are likely to contribute significantly to public understanding of the government response to environmental hazards from radioactivity at PTA.

We look forward to receiving your initial response within 20 business days of the receipt of this request, as provided by FOIA. Please call me if you have any questions. Thank you for your prompt attention to our request.

Mahalo,

Cory Harden mh@interpac.net 808-968-8965

Moku Loa Group, P.O. Box 1137, Hilo, Hawaii 96721

Cory (Martha) Harden

From: "Davis, Addison D SES CIV USA ASA IE" <Tad.Davis@us.army.mil>
To: <mh@interpac.net>; "Davis, Addison D SES CIV USA ASA IE" <Tad.Davis@us.army.mil>
Cc: "Tunick, Meredith Ms CTR USA ASA IE" <Meredith.Tunick@us.army.mil>
Sent: Saturday, September 26, 2009 7:56 PM
Subject: Re: FOIA

Cory,
 Many thanks for your follow up note. Am enroute back to DC from TX. Will look into the status of a reply to your request and provide a response soonest.
 Greatly appreciate your continued engagement on a number of important issues to us all.
 Regards, Tad Davis

From: Cory (Martha) Harden <mh@interpac.net>
To: Davis, Addison D SES CIV USA ASA IE
Sent: Fri Sep 25 00:39:13 2009
Subject: FOIA

Dear Mr. Davis,

Thank you for meeting with me at Pohakuloa several months ago.

Can you please help obtain a response to this FOIA? I sent it nine months ago, then followed up several times, but still have not received the document.

thank you,

Cory Harden
 Sierra Club, Moku Loa group
 Box 1137
 Hilo, Hawai'i 96721
 808 968 8965
mh@interpac.net.

December 13, 2008

Colonel Howard Killian

Army Installation Management Command-Pacific

132 Yamanaga St.

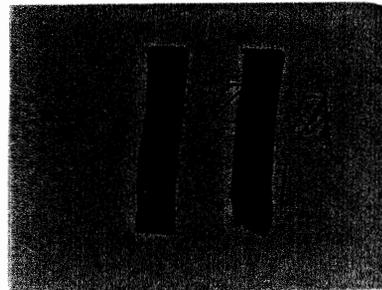
Fort Shafter, Hawai'i 96858

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We look forward to receiving your initial response within 20 business days of the receipt of this request, as provided by FOIA. Please call me if you have any questions. Thank you for your prompt attention to our request.



Kanab Local Review Council

11-18-67 Any
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meeting
minutes

Cindy Evans
Rita Tallett

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MNC permit

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Mr. Mirran - PTA



PU will report to you under garden

1962-1968

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why 1996 all 00 have prohibited under NRC license

P. Carter was dissatisfied - get hardware records
shown for other actions in West Coast

who other dissatisfied systems? (archival)
where is it?

P.C. system 1961-1971

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had 00 5 sprockets per workload

7 1/2" long x 6 1/2" or smaller sprocket when loaded

where is 00 in row? (diagram) does it have?

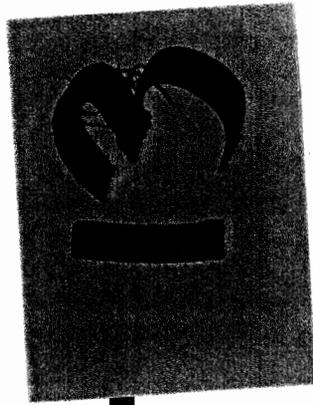
plan - when records
monitor could scoop for 00 print?
characteristics say - for each 00, where
it is - engine, for VT COL NRC
hobby etc. (not published)

NRC must permit a possible comments as
method to possible identification
end Jan
early Feb 2008

eyes to "Part 2 Substances" - some Registry
it may not be a change - terrain different
with 100 MB
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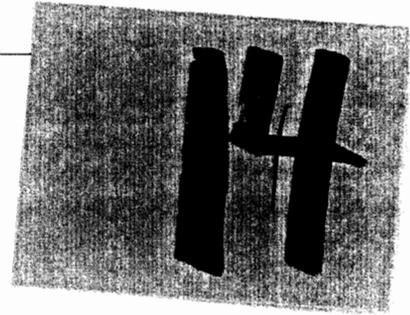
Project Current Status



*Port not
in comm.
Review not
w/submitter*

- **General**
 - Deputy Assistant Secretary of Army Davis visited with key leaders 26-31 OCT 08 and briefed current status of various efforts
 - Comprehensive Army-wide archive search underway for Davy Crockett System
 - Air Monitoring Study working
 - **Pohakuloa Training Area (PTA)**
 - Activated a Community Advisory Council
 - Characterization Survey: Aerial survey to start 3 NOV – 15 DEC 08
 - PTA air monitoring sample analysis:
 - Partially (half) complete 12 APR 08 results were published May 08
 - Half Awaiting analytical data
 - Modified Risk Assessment anticipated by APR 09
 - Developed B-2 impact assessment and temporary deconfliction measures
- **ATSDR Health Consultation complete – 25 AUG 08** “ATSDR also concludes that no adverse human health effects would be expected as a result of potential exposure to depleted uranium at Pohakuloa Training Area if the depleted uranium rounds were left at their current locations.”

See Air Search results

Cory (Martha) Harden

From: "Hayes, John" <John.Hayes@nrc.gov>
To: "Cory (Martha) Harden" <mh@interpac.net>
Sent: Wednesday, September 09, 2009 8:00 AM
Subject: RE: re-sending/ Pohakuloa reports
 Ms. Harden,

Thank you for resending.

While I am back on the mainland I was still traveling last week so I did not have the opportunity to respond to your email. The characterization report on Pohakuloa was provided to the NRC during its visit to Hawaii. It is now being entered into the ADAMS system. It should be available in a week or so.

I contacted Greg Komp of the Army concerning the other two reports in your email. Greg indicated that the Pohakuloa report and the Archives Search Report you refer to are to be posted to the Army's web site this week. It may be found at <http://www.imcom.pac.army.mil/du/Reports.htm>. Greg also indicated that there is not going to be a HHRA report performed because of the limited amount of DU identified at Pohakuloa.

Jack

From: Cory (Martha) Harden [mailto:mh@interpac.net]
Sent: Tuesday, September 08, 2009 2:24 PM
To: Hayes, John
Subject: re-sending/ Pohakuloa reports

re-sending, in case original went missing

----- Original Message -----

From: Cory (Martha) Harden
To: GVT US NRC Hayes
Sent: Sunday, August 30, 2009 3:12 AM
Subject: Pohakuloa reports

Jack Hayes.

Good to meet your team in person.

Would you please let me know the status of the characterization and HHRA reports for Pohakuloa, and how I can obtain them? As you know, I'm also waiting on the Archives Search Report requested by Freedom of Information Act nine months ago, most recently promised by Greg Kompf at your August 27, 2009 Hilo meeting.

It would seem all reports should be publicly available before the clock starts ticking on the comment due date.

I didn't find any of the three reports on the CD passed out August 27, or on ADAMS. The reference person at ADAMS didn't find the characterization or HHRA reports.

Re. the characterization report--

About April 15, 2008, in a letter to Sierra Club, Army Colonel Killian said "The Army, in concert with state and

other federal agencies. is working on characterization at Pohakuloa Training Area. At the conclusion of this effort, a complete report will be published. We expect this report to be available in the Fall of 2008."

About May 20, 2009, the Army said "The Army's characterization report will be published in the near future". in a letter to U.S. Representative Mazie Hirono of Hawai'i. I assumed this report would be on Pohakula, because the statement is in a paragraph about Pohakuloa, and the final Schofield characterization report is dated earlier, April 2008.

Also about May 20, 2008, Colonel Killian made a presentation to Hawai'i County Council. A printout of that "Depleted Uranium Update" says "Pohakuloa Training Area...Characterization Survey: Fall 08...BHHRA" anticipated by the end of the calendar year".

An Army "Project Current Status" printout dated March 14, 2008 says "Planning the PTA Characterization Survey: 24 APR 08...survey start 16 JUN 08."

Re. the HHRA--

See above re "Depleted Uranium Update."

I believe that some time after May 20, 2008, Colonel Killian told County Council there would be no HHRA, because there was not enough data, but later he or an Army document said there would be a modified HHRA because of lack of data.

Thank you for all your work.

Cory Harden
Sierra Club, Moku Loa group
Box 1137
Hilo, Hawai'i 96721
808 968 8965
mh@interpac.net

Attachment 2

Klukan, Brett

From: Cory (Martha) Harden [mh@interpac.net]
Sent: Wednesday, October 28, 2009 1:25 PM
To: Klukan, Brett
Subject: Re: comment deadline

It's not there yet? I mailed it about Oct 9 to you at Office of General Counsel, and to the other parties.

----- Original Message -----

From: [Klukan, Brett](#)
To: [Cory Harden](#)
Cc: [Jim Albertini](#) ; [Sexton, Kimberly](#) ; [Marco, Catherine](#) ; [Isaac D. Harp](#)
Sent: Wednesday, October 28, 2009 9:38 AM
Subject: RE: comment deadline

Ms. Harden,

Did you mail your request for hearing? I just want to be able to tell my mail room to look out for it (it can often take a while as most NRC mail goes through an irradiator). Thanks.

Cheers,
Brett Klukan

From: Isaac D. Harp [mailto:imua-hawaii@hawaii.rr.com]
Sent: Monday, October 26, 2009 7:23 AM
To: Sexton, Kimberly; Marco, Catherine; Hayes, John; Tadesse, Rebecca; Klukan, Brett
Cc: Cory Harden; Jim Albertini; Lanny Sinkin
Subject: Re: comment deadline

Aloha Nuclear Regulatory Commission Folks:

Now that the Army has admitted to their intentional use of depleted uranium munitions in Hawaii without a permit from the Nuclear Regulatory Commission (NRC) or from the Atomic Safety and Licensing Board I would like to know:

- 1) What are the consequences for the Army's intentional violations of federal law over a period of nearly 5 decades,
- 2) What additional consequences will be applied to the Army for intentionally concealing their crimes, and
- 3) What will be done to insure the Army's accountability of and removal of depleted uranium munitions and depleted uranium waste from Hawaii?

I would like to request a hearing on the Army's request to possess depleted uranium at Schofield on Oahu and at Pohakuloa on Hawaii island.

I am a native Hawaii as defined by federal definition. I am requesting a hearing because I believe that the Army has unleashed what I consider a never-ending threat to the health and well-being of Hawaii's lands and Hawaii's residents, both native and non-native.

I believe this to be the case due to the Army's admitted past unlawful use of and possession of depleted uranium in Hawaii since at least as long ago as the 1960's when the Army trained with Davey Crockett nuclear bomb launcher depleted uranium spotting rounds in Hawaii. I also believe that the Army may use depleted uranium munitions with their Stryker Brigade that is stationed in Hawaii, which as admitted by the Army has weapons capable of utilizing depleted uranium munitions. I also have suspicion based on past Army lies that the Army has used depleted uranium munitions in areas not yet disclosed by the Army, and as is the case now, needs to be discovered and reported by others.

Attachment 3

Hayes, John

From: luwella leonardi [phonicsworks@gmail.com]
Sent: Monday, October 12, 2009 4:33 AM
To: Hayes, John
Subject: Depleted Uranium public hearing for the Waianae Coast

Luwella K Leonardi
85-1363 Halapoe Place
Waianae, HI 96792

Dear John Hayes,

October 11, 2009

I am writing this letter requesting that a meeting be held for my community. We have for many years been in undated with bombing plume dust from the military here in Hawaii and specifically on the Waianae Coast. The military has trained and practiced their bombing in my community as well as their own community for a decade. It is with great disturbance that such a great country would continue this practice especially with the knowledge of depleted uranium is present in their weapons.

The sustainable projected five year plans for the military are to remove contaminated debris from within military installations in Hawaii. To keep military family safe from these toxic chemical is to scoop and send these contaminated soil to my community on the Waianae Coast. I have truckers in my community that are ignorant and have procurement jobs to enter

Schofield Barracks and load their trucks with contaminated soil and bring it to my community. It takes months but eventually, the loads of contaminated soil gets black topped and used as a truckers parking lot.

I have followed these truckers to Schofield Barracks and later at the end of the day watch these same truckers unload their load directly in back of my house. I have been in undated by this plume for many years. Every person that has been directly affected by these toxic dusts is sick. My community has many sick people and most people in my community have no medical coverage therefore, it is not reported until death occurs. Upon closer examination people die in my community before they reach full maturity when compared to other communities on Oahu.

I would appreciate the opportunity for a public hearing so that one can discuss the possibility of clean-up, contamination of my community, and a shorter life span. I appreciate your attention that you have given to this request.

Mahalo,
Luwella K Leonardi

Attachment 4

Sexton, Kimberly

From: Isaac D. Harp [imua-hawaii@hawaii.rr.com]
Sent: Monday, October 26, 2009 7:23 AM
To: Sexton, Kimberly; Marco, Catherine; Hayes, John; Tadesse, Rebecca; Klukan, Brett
Cc: Cory Harden; Jim Albertini; Lanny Sinkin
Subject: Re: comment deadline
Attachments: 1959 BALLOT.jpg

Aloha Nuclear Regulatory Commission Folks:

Now that the Army has admitted to their intentional use of depleted uranium munitions in Hawaii without a permit from the Nuclear Regulatory Commission (NRC) or from the Atomic Safety and Licensing Board I would like to know:

- 1) What are the consequences for the Army's intentional violations of federal law over a period of nearly 5 decades,
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I would like to request a hearing on the Army's request to possess depleted uranium at Schofield on Oahu and at Pohakuloa on Hawaii island.

I am a native Hawaii as defined by federal definition. I am requesting a hearing because I believe that the Army has unleashed what I consider a never-ending threat to the health and well-being of Hawaii's lands and Hawaii's residents, both native and non-native.

I believe this to be the case due to the Army's admitted past unlawful use of and possession of depleted uranium in Hawaii since at least as long ago as the 1960's when the Army trained with Davey Crockett nuclear bomb launcher depleted uranium spotting rounds in Hawaii. I also believe that the Army may use depleted uranium munitions with their Stryker Brigade that is stationed in Hawaii, which as admitted by the Army has weapons capable of utilizing depleted uranium munitions. I also have suspicion based on past Army lies that the Army has used depleted uranium munitions in areas not yet disclosed by the Army, and as is the case now, needs to be discovered and reported by others.

I also request that others interested parties be provided the opportunity of joining me at some later date should they wish to participate in the hearing process.

Please understand that like most of the natives of Hawaii I am severely limited financially so I would request to be provided with federal financial assistance to obtain sufficient legal counsel to match the capabilities of the Army's legal counsel in order to balance the playing field at the hearing. I hope that it is possible for the hearing to be held in Hawaii, where the hearing body will be able to enjoy the warmth of Hawaii and it's people. When we're not placed in a defensive position we can be the warmest and most welcoming people in the world.

I would also like to inform you that NOAA staff reported a few years ago that a Tomahawk missile was spotted in the nearshore waters of the Northwestern Hawaiian Islands and I would like to request the NRC see to it's proper removal and disposal.

Further for the record, Lyndon B. Johnson's Executive Orders 11166 and 11167 of 15 August 1964 are unlawful takings of Hawaii lands, otherwise known as stealing. Johnson had no legitimate authority to take Hawaii lands for military use, or for any other purpose.

Johnson claimed that his authority was based on section 5(d) of the Act of March 18, 1959, providing for the admission of the State of Hawaii into the union. The Act of March 18, 1959, providing for the admission of the State of Hawaii

into the union was in and of itself entirely illegitimate. I attach hereto a specimen of the June 27, 1959 Hawaii statehood ballot, which proves beyond a doubt that the statehood process was illegitimate.

I'm sure that you will notice that the ballot was illegitimate for the lack of alternatives to statehood. What corrupted the process even further was the fact that foreigners, including US military personnel stationed in Hawaii, were allowed to participate in the vote. This is just one of the several United States injustices committed against Hawaii since the USS Boston, unlawfully and without congressional approval landed military troops in Honolulu Harbor to support U.S. businessmen with the unlawful displacement of Hawaii's lawful government in 1893 and the imprisonment of our Queen in her own palace.

U.S. Public Law 103-150 shares some insight into what occurred here, although obviously the United States wouldn't want to smear itself by admitting to the entirety of their crimes against Hawaii.

Thank you for adding these comments into the record, and for any response that you might have.

Sincerely,

Isaac Harp
P.O. Box 437347
Kamuela, HI 96743

----- Original Message -----

From: [Klukan, Brett](#)
To: [Isaac D. Harp](#) ; mh@interpac.net ; ja@interpac.net
Cc: [Sexton, Kimberly](#) ; [Marco, Catherine](#) ; [Hayes, John](#) ; [Tadesse, Rebecca](#)
Sent: Friday, October 16, 2009 3:20 AM
Subject: RE: comment deadline

Mr. Harp,

You are correct. I would add two things:

1. A petition for hearing submitted after the deadline set by the NRC Commission will be granted if in addition to the general petition requirements--a show of standing (10 C.F.R. 2.309(d)) and at least one contention meeting the admissibility requirements (10 C.F.R. 2.309(f)(1))--the proffered contention or contentions are timely pursuant to 10 C.F.R. 2.309(f)(2) or, if not timely, a balance of the factors in 10 C.F.R. 2.309(c) weighs in favor of granting the petition. For your convenience, here is the link to the text of [10 C.F.R. 2.309](#).

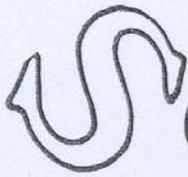
2. In an NRC licensing proceeding such as the instant, there are usually three parties to the proceeding: 1) the applicant (here, the Army), 2) one or more petitioners who have put forth requests for hearing and 3) the NRC staff (whom Kimberly Sexton and I represent). Ms. Sexton and I are not, however, the adjudicators in this proceeding (that role is held usually by a panel of judges from the Atomic Safety and Licensing Board to whom the NRC Commission has delegated adjudicatory authority).

Cheers,
Brett Klukan

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 8.5.421 / Virus Database: 270.14.19/2438 - Release Date: 10/15/09 12:02:00



OFFICIAL BALLOT



SATURDAY, JUNE 27, 1959

VOTE ON ALL THREE PROPOSITIONS

Shall the following propositions, as set forth in Public Law 86-3 entitled "An Act To provide for the admission of the State of Hawaii into the Union," be adopted?

1. Shall Hawaii immediately be admitted into the Union as a State?

YES	<input type="checkbox"/>
NO	<input type="checkbox"/>

2. The boundaries of the State of Hawaii shall be as prescribed in the Act of Congress approved March 18, 1959, and all claims of this State to any areas of land or sea outside the boundaries so prescribed are hereby irrevocably relinquished to the United States.

YES	<input type="checkbox"/>
NO	<input type="checkbox"/>

3. All provisions of the Act of Congress approved March 18, 1959, reserving rights or powers to the United States, as well as those prescribing the terms or conditions of the grants of lands or other property therein made to the State of Hawaii are consented to fully by said State and its people.

YES	<input checked="" type="checkbox"/>
NO	<input type="checkbox"/>

To vote on a proposition, make an X in the square to the right of the word "YES" or NO".

VOTE ON ALL THREE PROPOSITIONS

Attachment 5

Sexton, Kimberly

From: Julian, Emile
Sent: Tuesday, October 27, 2009 8:30 PM
To: 'Isaac D. Harp'
Cc: 'kent.herring@us.army.mil'; Docket, Hearing; 'mh@interpac.net'; Marco, Catherine; Sexton, Kimberly; Klukan, Brett; Giitter, Rebecca; Rothschild, Trip; Liaw, Stephanie
Subject: RE: Army Request for a Depleted Uranium Possession-only Permit
Attachments: U.S. Army (40-9083-MLA) E-mail Cert.doc

Hi Mr. Harp,

Thank you for your e-mail. By this e-mail I am copying the NRC staff and the U.S. Army representative with your e-mail. I have also attached a draft service list. Should you provide additional documents, kindly send copies to those on the list.

Thank you,

Emile L. Julian
Assistant for Rulemakings
And Adjudications
Office of the Secretary, NRC
301-415-1966

From: Isaac D. Harp [mailto:imua-hawaii@hawaii.rr.com]
Sent: Monday, October 26, 2009 7:21 PM
To: Julian, Emile
Subject: Army Request for a Depleted Uranium Possession-only Permit

Aloha Nuclear Regulatory Commission:

Regarding the Army's request for an NRC Depleted Uranium possession-only permit in Hawaii, I would like to join Cory Harden's:

- (1) request for exemption from electronic filing
- (2) request for extension of time to file a request for hearing and petition for intervention
- (3) petition for intervention

This is the basis for my contention:

I am a native of Hawaii as defined by federal definition. I am requesting a hearing because I believe that the Army has unleashed what I consider to be a never-ending threat to the health and well-being of Hawaii's lands and Hawaii's residents, both native and non-native. I believe this to be the case due to the Army's admitted past unlawful use of and possession of depleted uranium in Hawaii since at least as long ago as the 1960's when the Army trained with Davey Crockett nuclear bomb launcher depleted uranium spotting rounds in Hawaii. Depleted Uranium has been pointed to as the probable cause of various cancers and other mysterious illnesses that many military veterans suffer from. The veterans' illnesses has been cleverly referred to by the military as "Gulf War Syndrome."

According to Executive Order 12898 of February 11, 1994, Section 1-1 Implementation, subsection 1-101. Implementation I quote:

"Agency Responsibilities. To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental

justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations..."

Because we know that depleted uranium now pollutes Hawaii, environmental justice is definitely required to minimize the potential environmental and health threats of this material. Disturbing the depleted uranium with on-going aerial bombing, artillery bombardment, air to ground missiles, and other live-fire munitions is placing the residents of Hawaii in jeopardy. I request an investigation by the NRC to determine if a process is available to halt live-fire training at Hawaii military sites at least until the hearing process is completed.

I would like to submit for the record, the attached graphic from government statistics on cancer rates in Hawaii. Notice that on Hawaii island where Pohakuloa live-fire training is located the highest rates of cancer occur. Second highest location is Oahu where Schofield and Makua live-fire training occurs. Third highest is Maui County where the island of Kaho'olawe is located. Kaho'olawe served as a military bombing range for many decades, and that bombing activity may have included the use of depleted uranium munitions.

I also believe that the Army may use depleted uranium munitions with their Stryker Brigade that is stationed in Hawaii if provided with a depleted uranium possession permit. The Army has admitted that some of the Stryker vehicles are capable of utilizing depleted uranium munitions.

I also have suspicion based on past Army lies that the Army has used depleted uranium munitions in areas not yet disclosed by the Army, and as is the case now, needs to be discovered and reported by others. Such areas may include the Makua live-fire training area on Oahu, which was unlawfully taken by Presidential Executive order 11166 of 15 August 1964, and Kaho'olawe, which was returned to state of Hawaii control to be held in trust for a native Hawaiian governing entity.

Sincerely,

Isaac Harp
P.O. Box 437347
Kamuela, HI 96743
Cell: 808-345-6085

Attachment 6

From: Jim Albertini [mailto:JA@interpac.net]

Sent: Tuesday, October 27, 2009 5:05 AM

To: Julian, Emile; Hayes, John

Cc: Cory Harden; Isaac D. Harp; Alan McNarie; A P honolulu; advertiser; Hilo Trib; Hono Weekly; Star bulletin; Ian Lind; KBOO; kgmb tv9; KHNL-TV; KHNL-TV; KPUA; Maui news; Mike Yuen; bret yager; Jim Quirk; Baron Sekiya; jason Armstrong; admin; peter sur; David Corrigan; david schlesinger; jsong@ap.org; paka@newpacificvoice.org

Subject: NRC hearing request

To the NRC:

I hereby request an NRC hearing on the Army's request for a depleted uranium possession-only permit.

I request to join Cory Harden and Isaac D. Harp requests and petition to intervene.

I wish to join Cory Harden's

(1) request for exemption from electronic filing

(2) request for extension of time to file a request for hearing and petition for intervention

(3) petition for intervention

This is the basis for my contention:

1. The Army is basically ignoring Hawaii County Council's resolution 638-08, passed (8-1) on July 2, 2008 which lists eight action points, especially halting all live-fire and anything that creates dust at Pohakuloa training Area (PTA) until an assessment and clean up of the DU contamination already present. I was present at Mauna Kea State park on May 29, 2007 when citizen radiation monitors recorded readings of up to 75 counts per minute with dust devils coming directly off PTA range II, where Davy Crockett DU spotting rounds had been fired, located 1-2 miles away from Mauna Kea Park. The fact of Davy Crockett DU spotting rounds fired at PTA was confirmed by the Army in Aug. 2007, three months after our recorded radiation readings.

2. Army search of contamination is inadequate. Less than 1% of PTA has been surveyed for DU

contamination. There needs to be permanent independent air monitoring around the base to determine radiation coming off the base.

3. There needs to be a thorough and complete search of record archives (including classified files) other possible DU munitions used at PTA and other sites in Hawaii beyond the Davy Crockett DU spotting round.

Davy Crockett was first used at PTA in 1962. The Army claims DU has been banned in training since 1996. What about the years inbetween. That's 34 years.

4. Military has ignored Hawaii County Council resolution 70I-08 naming Dr. Lorrin Pang, MD as the official county representative on the DU issue with the Army.

5. The Army makes DU health hazard disclaimers without basis and ignores inhalation hazard of DU oxide.

6. PTA is Hawaiian Kingdom Sacred Land that is under illegal U.S. occupation. There is no legal basis for the U.S. to be bombing and continuing control at PTA.

7. Decommission PTA instead of expanding live-fire by a factor of two --from 7 million rounds a year to 14.8 million rounds according to the Army's Stryer EIS.

8. The State of Hawaii lease of land to PTA does not allow for a nuclear waste dump at PTA. The lease to PTA should be canceled.

9. Reports of animal tumors in the PTA area need to be investigated for possible links to DU exposure.

10. The pre-cautionary principle needs to be a guiding light for all decision making and involving citizen participation in the decision making process. Afterall, it is the citizens that the Army is suppose to be defending, not endangering.

The NRC needs to be aware of the military's history of abuse in Hawaii.

In the 1960s, around the same time the Army was testing DU Davy Crockett spotting rounds at PTA, the Army got a lease of State land in the Waiakea Forest Reserve, which is the city of Hilo's watershed, to do what the Army said would be "weather testing." Well the Army lied. They were no doing weather testing, they were testing chemical warfare agents in Hilo's watershed. One of the agents was nerve gas GB that can kill in minutes in dosages of one milligram, approximately 1/50 of a drop. When this military abuse and lying was exposed by Hawaii Congresswoman, Patsy T. Mink, citizen outrage was expressed and the State lease to the Army was canceled. The same should be done today with PTA.

(For more details on the history of military abuse in Hawaii read The Dark Side of Paradise --Hawaii in a Nuclear World, by James V. Albertini, et all.)

Other examples of military environmental abuse: On Hawaii Island, there are 57 known present and former military sites, totaling hundreds of thousands of acres of land and coastal waters that are in need of environmental clean-up. Many of these sites are littered with unexploded ordnance and other chemical toxins. The projected cost of such clean up is in the billions of dollars. But the military claims "No money." The military has plenty of money to make its mess but little or no money to clean up its mess. This travesty of justice and abuse of the earth must end.

Jim Albertini

Malu 'Aina Center for Non-violent Education & Action

P.O.Box AB

Kurtistown, Hawai'i 96760

phone: 808-966-7622

email: JA@interpac.net

Visit us on the web at: www.malu-aina.org

Attachment 7

PO Box 10265
Hilo, Occupied Hawai'i 96721
October 30, 2009

U.S. Nuclear Regulatory Commission (NRC)
Office of the Secretary of the Commission
Rulemakings & Adjudications Staff
Mail Stop O-16C1
Washington, DC 20555-0001

Dear NRC staff,

This letter concerns 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.

I previously submitted an October 9, 2009 REQUEST FOR EXTENSION OF TIME TO FILE A REQUEST FOR HEARING AND PETITION FOR INTERVENTION.

As I discussed with Emile Julian by phone October 26, please consider the October 9 submission for the original purpose and also as a PETITION FOR INTERVENTION.

Please also consider the enclosed ADDENDUM, dated October 30, 2009, as part of the October 9 document.

To John Hayes: please consider the October 9 and 30 documents as comments on the license application.

Thank you,

Cory Harden
mh@interpac.net 808-968-8965

enclosure
ADDENDUM October 30, 2009

cc
NRC Office of Commission Appellate Adjudication
NRC Office of the General Counsel
Kent Herring, US Army Installation Command, Environmental Law Division
John Hayes, NRC Project Manager for DU in Hawai'i
OGCMailCenter@nrc.gov (e-mail materials only)
Jim Albertini, Malu Aina
Isaac Harp
Angela Rosa

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 any mention of DU 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]*

License

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 in mice that then metastasize 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 thought *[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 detect [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

75-6081 Ali'i Drive RR-103
Kailua-Kona, Hawaii 96740
Home Phone: (808) 334-0108
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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 ES²P²AR 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

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(PII Redacted) (PII Redacted)
(PII Redacted)
(PII Redacted)

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 one of Hawaii's top (3%) physicians for 2006-7.
Selected as one 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):

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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.
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Paracoccidiomycosis: An epidemiologic survey in a pediatric population from the Brazilian Amazon using skin tests. Published, AJTMH

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 from Makua or PTA or are they simply staged photos for illustrative purposes? >

> Mike Reimer

> GeoMike5@att.net.

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 the 238-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 TI activated NaI detectors were used to gather gamma spectra, looking for 766 and 1001 keV photons emitted by ^{234m}Pa 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. The 1001 keV gamma has a branching ratio (abundance per decay) of just 0.8% (0.008) [NIM in Physics Research, 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 $1.13 \times 10^6 \text{ cm}^2$ (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 counts being 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 $(50 \text{ counts detected}) / [(0.4 \text{ photopeak efficiency}) \times (0.00022 \text{ solid angle}) \times (BR=0.26 \text{ or } 0.008)] = 1.7 \times 10^6 \text{ or } 5.5 \times 10^7 \text{ Pa234 dps}$. 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

David Henkin

Staff Attorney

Earthjustice

223 S. King St., Suite 400

Honolulu, HI 96813

T: 808-599-2436, ext. 614

F: 808-521-6841
www.earthjustice.org

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 munitions 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 nothin 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
Annajeane.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

Attachment 8

Hayes, John

From: Michial Freigang [michialfreigang@hotmail.com]
Sent: Tuesday, October 27, 2009 8:05 PM
To: Hayes, John
Subject: DU PTA

Dear Mr. Hayes,

The military has never been known for it's transperancy, issues with radioactive materials should be handled as follows:

" independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS – an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

Anything less-the future could only be a guess, at best.
Respectfully submitted,
Michial Freigang Taxpayer/Voter

Windows 7: It helps you do more. [Explore Windows 7.](#)

Attachment 9

Hayes, John

From: pihanakalani@gmail.com on behalf of Tek Nickerson [tek@pihanakalani.org]
Sent: Tuesday, October 27, 2009 3:25 AM
To: Hayes, John
Subject: independent monitoring for Pohakuloa and the eight other Training Ranges

Dear Mr. Hayes,

I am asking for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

Mahalo for your consideration.

A hui hou, Tek Nickerson

--

Tek Nickerson National director | tek@pihanakalani.org tel. 808-822-4795
SHARE, Inc. The Sacred Hoop of America Resource Exchange
A non-profit 501 (c) (3), registered in CT,
6978-B Kokeanu Place, Kapa'a, (Kauai), HI 96746 USA
Restoring balance through Aloha

Interview on Oneness:

http://www.theharmonyproject.org/oneness_interview5.html

Attachment 10

Hayes, John

From: Lisa Raphael [lisaraphael@worldnet.att.net]
Sent: Tuesday, October 27, 2009 2:04 PM
To: Hayes, John
Subject: protection from depleted uranium

I ask for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess"

Lisa Rapha El
Kapaa

Attachment 11

Hayes, John

From: mshootz@aol.com
Sent: Tuesday, October 27, 2009 3:51 PM
To: Hayes, John
Subject: Pohakuloa

Dear Mr. Hayes

I ask for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

Mahalo for your attention to this matter.

Blessings, Michael Shootz
Kapaa, Hawaii

Attachment 12

Hayes, John

From: Jonathan Cole [joncole@gmail.com]
Sent: Friday, October 23, 2009 12:59 PM
To: Hayes, John
Subject: Comments for the NRC re: Hawaii Island and Pohakuloa Training Ground

Dear Sir,

I understand that it is the responsibility of the NRC to quantify risks regarding nuclear materials and their effect on public health.

It has become increasingly clear that some kind of environmental contamination is raising cancer rates to unacceptable levels on Hawaii Island.

It has come to our attention that the Army used depleted uranium munitions in Pohakuloa Training Area and neglected to clean it up or inform the public (until recently, under pressure from the public).

Pohakuloa happens to be located in a geographical area where strong winds scour the flats between the mountains (known as the "saddle") . For decade heavy artillery fire in the same area may well have aerosolized DU remnants allowing nano particles to be spread down wind which can either be Hilo or Kona, depending on the weather. Anecdotal reports of spikes from radiation monitors in the presence of gusty winds outside of Pohakuloa Training Area suggest that this problem needs urgent and un-biased monitoring.

The Army has shown itself to have too much conflict of interest to leave this problem to them. We need public officials and regulatory agencies to be pro-actively scientific rather than to back up the military whose activities may harm public health. And by the way, aerosolized depleted uranium is probably the most harmful to the soldiers who are in the vicinity. Protecting our men and women in the armed forces has a higher priority than protecting the policy of the Army and Pentagon. People or policy? There is really only one moral choice.

Please require independent monitoring of the Pohakuloa Training Area. I suggest that all training areas, everywhere have such monitoring. Do not allow the independent monitoring entities to have any conflict of interest with the military or defense industries. Such conflicts should be expressly prohibited as malfeasance and a Federal felony.

Please, require an environmental impact statement before granting permits for any nuclear materials. This should be a part of a process that includes a formal public hearing.

Contaminated areas should be decommissioned forthwith and the military should be required to pay for the state-of-the-art cleanup technology.

Please do your duty to your country and protect the citizens from the harmful side-effects of bad policy.

Thank you,

Jonathan Cole
44-3039 Kalopa Mauka Road
Honokaa, Hawaii 96727

Attachment 13

Hayes, John

From: nunyabus [inunyabus@gmail.com]
Sent: Tuesday, October 27, 2009 4:49 PM
To: Hayes, John
Subject: Depleted uranium abuses

Dear Mr. Hayes,

Not only is it imperative to have hearings and to ask for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess", an all out expulsion of military bases in Hawaii is on the horizon.

So, in other words, if the nuclear commission/military/Pentagon cannot even comply with protection of the most basic human rights then something more drastic must be implemented. The abuse is being taken for granted. It is NOT the U.S. military/Pentagon right to violate human rights.

Kauai (PMRF) needs to be included as well.

Sincerely,
Elaine Durbin

--

NOTICE: Due to Presidential Executive Orders, the National Security Agency (NSA) may have read emails without warning, warrant, or notice. They may do this without any judicial or legislative oversight. You have no recourse, nor protection..... IF anyone other than the addressee of this e-mail is reading it, you are in violation of the 1st & 4th Amendments to the Constitution of the United States.

Attachment 14

Hayes, John

From: Leslie Ann Laing [leslieannlaing@yahoo.com]
Sent: Wednesday, October 28, 2009 12:02 AM
To: Hayes, John
Subject: Depleted Uranium

Dear John Hayes:

I ask for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

Store NO depleted Uranium in Hawai'i, nor any other Training Range! Please clean them all up.

Sincerely,

Leslie Ann Laing

Leslie Ann Laing
P. O. Box 989
Kapa'a, Kaua'i, Hawai'i, 96746
808-821-2244

Attachment 15

Hayes, John

From: Mike Swerdlow [mike@mikeswerdlow.com]
Sent: Friday, October 23, 2009 3:52 PM
To: Hayes, John
Subject: Polluting Pohakaloa

What bitter irony.

Isn't it ironic that the pentagon, the military branch of our government that is here to protect us, is helping to destroy us. One of the main and worst polluters on the Big Island of Hawaii is the military base at Pohakaloa. The 4,600 lbs.of mercury and lead they release into the soil every year, stays in the food chain and accumulates, and now we can add uranium, which is also putting our health at risk. The Pentagon's budget also helps to destroy our social programs by taking hundreds of billions of dollars out of our taxes every year that are needed to help the average American working class families. They waste much of our taxes on lucrative pork contracts to their political and financial supporter's favorite war machine corporations, like Halliburton, Bechtel, Lockheed Martin, the list goes on and on. Is our government going to protect us from the Pentagon or is the pentagon the real power in our government. In a democracy, we the people, should have the real power over the military to keep them from poisoning us with pollutants and squandering our resources, but it looks like the corporations that profit from our wars, run our government. It's the same "Bombs vs. Butter" argument that we had during another wasted war,"Vietnam". So, we keep having wars, we keep losing the money to fund our social programs like education, medical insurance, homelessness, hunger, environment protection, and the list goes on. Taxes, gas, medical insurance,education and the basic cost of living keep going up and our standard of living keeps going down. We keep getting poisoned from pollution by the very branch of the government that is here to protect us. Instead of making our country stronger, it seem that they are making more of us weaker, sicker, dumber, and poorer. My major concern, and the only place where my voice might be heard, is for the environment on the Big Island. We need an independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

Mahalo, Mike Swerdlow
Waikoloa

Attachment 16

Hayes, John

From: Lisa Andrews [paikoman@yahoo.com]
Sent: Monday, October 26, 2009 8:42 AM
To: Hayes, John
Subject: Aloha from Hawaii

Alooooooha John.

We are asking for Independent monitoring for Pohakuloa and the 8 other Training Ranges being granted a "permit to possess" depleted uranium, AND an E.I.S., a formal hearing, decommissioning and clean up of all ranges that have applied for a "permit to possess."

Well we sure are needing and counting on you to give us the truth about Pohakuloa. Hawaii residents, her visitors and their future generations deserve the truth, the clean up, and the above listed requests. We pray that your head, heart and conscience may act as one and grant these wishes so that some day we, you included, may be here without threat to health and reproductive harm and that WE MAY ALL SLEEP SAFE AND SOUNDLY.

MAHALO NUI LOA, thank you very much.

Sincerely,
Lisa Hallett and Todd Andrews

Attachment 17

Hayes, John

From: david schlesinger [david@bigisland-bigisland.com]
Sent: Friday, October 23, 2009 2:34 AM
To: Hayes, John
Subject: Aloha John

Please do independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

--

2 Scoops Aloha David

BigIsland-BigIsland.com

Simple-Origami-For-Everyone.com

Attachment 18

Hayes, John

From: Jeff Sacher [jsacher@kona.net]
Sent: Friday, October 23, 2009 9:59 AM
To: Hayes, John

Aloha,

I live on Big Island and I understand that in Hawaii our island has the highest rate of cancer. Because of my concern for my island and my state, I'm writing to request independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium. I also ask that an EIS be performed, a formal hearing be held for the community, decommissioning take place immediately, and to immediately start clean up of all ranges that have applied for a "permit to possess".

Mahalo,
Jeff Sacher
Kawaihae, Big Island

Be not afraid of going slowly...be afraid instead of standing still.

Attachment 19

Hayes, John

From: April Lee [april@kre2.com]
Sent: Friday, October 23, 2009 3:10 AM
To: Hayes, John
Subject: Independent monitoring for Pohakuloa +

Dear Mr. Hayes,

I urge you to require independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium. Also needed is an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess". They were firing rounds up there today and yesterday...it shakes the air around my house in Waikoloa Village. I can't believe what it must be like for the inhabitants of Waiki'i Ranch.

Me ka pono, (Respectfully)

April & Jeffrey

April K. Lee & Jeffrey D. Lee
P.O. Box 384569; Waikoloa, HI 96738
Office: 808.883.0409 Toll Free: 877.781.3070
Fax: 808.443.0390
Cells: A 989.5995/J 960.0031
Email: april@kre2.com jeffrey@kre2.com

Attachment 20

Hayes, John

From: Pash Galbavy [pash@unmaskit.com]
Sent: Friday, October 23, 2009 8:30 PM
To: Hayes, John
Subject: DU

I am writing to ask for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess". Thank you.

Sincerely, Pash Galbavy

Pash Galbavy
Alive Today Enterprises
(928) 284-4021
(928) 254-8126 cell
www.unmaskit.com
www.faceuptopeace.com

"Man is least himself when he talks in his own person. Give him a mask, and he will tell you the truth." - Oscar Wilde

Attachment 21

Hayes, John

From: Andrea Cronrod [andreaacronrod@yahoo.com]
Sent: Friday, October 23, 2009 11:49 AM
To: Hayes, John
Subject: monitoring for depleted uranium

Aloha Mr. Hayes:

I have spent many years of my life living in Hawaii. The safety and preservation of the land and the people is vital for life to continue.

Considering the research and facts that have been shown to validate that there is danger from depleted uranium, I agree that it would be worthwhile for there to be independent monitoring for Pohakuloa and the 8 other Training Ranges. A formal hearing, decommissioning and clean up of all ranges that have applied for a "permit to possess" would be a good thing as well.

Thank you very much for your time and consideration to this matter.

Andrea Cronrod

Attachment 22

Hayes, John

From: Joel Levey [levey@wisdomatwork.com]
Sent: Monday, October 26, 2009 1:15 PM
To: Hayes, John
Subject: NRC - Request EIS for all ranges

Mr. Hayes,
Good day to you.

As a long term resident of the Island of Hawaii who has worked in medicine for over 30 years we write to ask for independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium, PLUS - an E.I.S., a formal hearing, decommissioning, and clean up of all ranges that have applied for a "permit to possess".

Please register this request and allow it to influence any decisions or policies you make for your agency moving forward. It is time to give attention to this matter which has serious health implications for the people in all of these regions.

Sincerely,

Dr. Joel Levey
Michelle Levey
Kapaau, HI 96755

Attachment 23

Hayes, John

From: Stephanie Naihe Laxton [naihe@msn.com]
Sent: Monday, October 26, 2009 11:41 PM
To: Hayes, John
Subject: Nuclear Regulatory Commission

Aloha Mr. Hayes,

In regards to the above, I would like to request an independent monitoring for Pohakuloa and the eight other Training Ranges being granted a "permit to possess" depleted uranium. In addition a completed E.I.S and a formal hearing; decommissioning, and clean up of all ranges that have applied for a "permit to possess"

Aloha,

Stephanie N. Naihe Laxton
P.O. Box 40
Kapaau, HI 96755-0040

Windows 7: I wanted more reliable, now it's more reliable. [Wow!](#)

Attachment 24

Hayes, John

From: angelarosa48@hotmail.com on behalf of angela rosa [essentialhealth@webtv.net]
Sent: Wednesday, October 28, 2009 8:41 PM
To: Julian, Emile; Hayes, John
Cc: Jim Albertini; Cory Harden
Subject: NRC hearing request

To the NRC:

I hereby request an NRC hearing on the Army's request for a depleted uranium possession-only permit. and request to join Cory Harden and Isaac D. Harp requests and petition to intervene as...

(1) request for exemption from electronic filing

(2) request for extension of time to file a request for hearing and petition for intervention

(3) petition for intervention

This is the basis for my contention:

1. The Army is basically ignoring Hawaii County Council's resolution 638-08, passed (8-1) on July 2, 2008 which lists eight action points, especially halting all live-fire and anything that creates dust at Pohakuloa training Area (PTA) until an assessment and clean up of the DU contamination already present. I was present at Mauna Kea State park on May 29, 2007 when citizen radiation monitors recorded readings of up to 75 counts per minute with dust devils coming directly off PTA range II, where Davy Crockett DU spotting rounds had been fired, located 1-2 miles away from Mauna Kea Park. The fact of Davy Crockett DU spotting rounds fired at PTA was confirmed by the Army in Aug. 2007, three months after our recorded radiation readings.

2. Army search of contamination is inadequate. Less than 1% of PTA has been surveyed for DU contamination. There needs to be permanent independent air monitoring around the base to determine radiation coming off the base.

3. There needs to be a thorough and complete search of record archives (including classified files) other possible DU munitions used at PTA and other sites in Hawaii beyond the Davy Crockett DU spotting round.

Davy Crockett was first used at PTA in 1962. The Army claims DU has been banned in training since 1996. What about the years inbetween. That's 34 years.

4. Military has ignored Hawaii County Council resolution 70I-08 naming Dr. Lorrin Pang, MD as the official county representative on the DU issue with the Army.

5. The Army makes DU health hazard disclaimers without basis and ignores inhalation hazard of DU oxide.

6. PTA is Hawaiian Kingdom Sacred Land that is under illegal U.S. occupation. There is no legal basis for the U.S. to be bombing and continuing control at PTA.

7. Decommission PTA instead of expanding live-fire by a factor of two --from 7 million rounds a year to 14.8 million rounds according to the Army's Stryer EIS.
8. The State of Hawaii lease of land to PTA does not allow for a nuclear waste dump at PTA. The lease to PTA should be canceled.
9. Reports of animal tumors in the PTA area need to be investigated for possible links to DU exposure.
10. The pre-cautionary principle needs to be a guiding light for all decision making and involving citizen participation in the decision making process. Afterall, it is the citizens that the Army is suppose to be defending, not endangering.

The NRC needs to be aware of the military's history of abuse in Hawaii.

In the 1960s, around the same time the Army was testing DU Davy Crockett spotting rounds at PTA, the Army got a lease of State land in the Waiakea Forest Reserve, which is the city of Hilo's watershed, to do what the Army said would be "weather testing." Well the Army lied. They were no doing weather testing, they were testing chemical warfare agents in Hilo's watershed. One of the agents was nerve gas GB that can kill in minutes in dosages of one milligram, approximately 1/50 of a drop. When this military abuse and lying was exposed by Hawaii Congresswoman, Patsy T. Mink, citizen outrage was expressed and the State lease to the Army was canceled. The same should be done today with PTA.

(For more details on the history of military abuse in Hawaii read The Dark Side of Paradise --Hawaii in a Nuclear World, by James V. Albertini, et all.)
Other examples of military environmental abuse: On Hawaii Island, there are 57 known present and former military sites, totaling hundreds of thousands of acres of land and coastal waters that are in need of environmental clean-up. Many of these sites are littered with unexploded ordnance and other chemical toxins. The projected cost of such clean up is in the billions of dollars. But the military claims "No money." The military has plenty of money to make its mess but little or no money to clean up its mess. This travesty of justice and abuse of the earth must end.

Angela Rosa RN/LMT/Health Consultant
Big Island Resident for 31 years
PO BOX 43
Hawi, Hi 96719

Attachment 25

Hayes, John

From: wildmindgarden@gmail.com on behalf of Jasper Moore [jasper96720@gmail.com]
Sent: Wednesday, October 28, 2009 4:47 AM
To: Hayes, John
Subject: request for EIS and a formal hearing

Aloha Mr. Hayes,

I was present at the presentation you and your panel from the Nuclear Regulatory Commission gave to the community in Kona

I am requesting a full E.I.S. of this serious problem of D.U. contamination. .

If what many residents suspect to be true is found to be so then independent monitoring with citizen's involved in the monitoring and fact-finding process is called for.

It should be the mandate of NRC to start the de-commissioning process at Pohakuloa, Schofield, and other training ranges across the country in possession of DU. The last thing we need at this late stage on planet earth is a 'cover up'. We urge you to support the communities who are asking for your protection.

I refer you to the map provided in this link. Can you please explain why there is a higher statistical fact of cancer on the Big Island? Age of population and density of population will not explain this. I don't believe that the statistics of ethnicity can be manipulated to cover up this high rate of cancer incidence. We have, in 'theory' the freshest air and cleanest water and soil of any of the islands.

A department of Public Health spokesperson (the State Health Dept. official for the Radiation Branch) dismissed claims from the community of high cancer rates in Kona by stating falsely that the reason for the statistics was that 'everyone' in Kona was 'old' when the average age at that time was 37 years of age.

There is no doubt that there has been over 50 years of cover up. The micronesians who have made Hawai'i their home cannot return to their islands because of contamination. It is documented that they were given radiation pills in order to study the deadly effects of radiation on the human body. They were lied to and told this was 'medicine'.

I would also like to ask for a formal hearing but would ask that there are efforts made to make the process accessible for the average person.. and not a smokescreen of 'science'. I have to ask you.. why does 'science' have to be so complicated when the facts are simple?

Please address the simple fact that D.U. is highly pyphoric. Nothing short of covering over vast acreage of Pohakuloa with concrete will protect exposure of D.U. .. tiny particles of which burn and become finer than gas. This is not practical. At the very least Pohakuloa Training Area should be decommissioned to reduce the disturbance of contamination.

The site you are evaluating is above the homes of all the residents of the island of Hawai'i. This very fact exposes all the residents of this island to risk of contamination because of airborne particles travelling off base due to continued military activity and due to the extrememy pyphoric nature of D.U. as a substance.

Please address why you would grant a 'license' to the U.S. Military to be responsible for the safe handling of this nuclear waste when "In August, just one month before B-2s began dropping bombs on radioactively contaminated soils at Pohakuloa, the Army released a report of an aerial survey confirming the presence of what they maintain is former use of Depleted Uranium on the military site." (Press Release of Malu 'Aina). This

shows a callous and irresponsible disregard for the community around this base. It was either an act of total ignorance or it was a calculated effort to further disperse incriminating evidence. Either way it is in-execusable. Please address the fact that it is this agency (The U.S. Military) that you propose to license to 'responsibly' manage and contain the Nuclear Hazard that they have themselves generated.

Please also address how this Agency should be trusted when they have not shown themselves to be honest with regards to the Nuclear Contamination on Pohakuloa or other sites in Hawai'i. The U.S. military and their spokespersons continually misrepresented the facts and asserted that Pohakuloa could not possibly be contaminated with D.U.

Because D.U. has the properties of a heavy metal, Please specifically address the question of the quality of drinking water for the community. My wife wrote a letter to our Board of Water Supply concerning testing for radiation. She received a reply that it was not necessary to investigate this matter. We would like to know how you propose to test the drinking water of all island residents. We would like to know how you propose to protect the water supply from further contamination given that Depleted Uranium has already spread off base ?

How do you propose to 'regulate' microparticles of D.U. that are being disturbed due to military activity such as army training exercises, bombing and target practice?

I ask that you see that the army follow their own regulation AR 700-48. According to author of these regulations, Dr. Doug Rokke; these Hawai'i training areas must be closed down now, and every speck of DU must be cleaned up. It will be the U.S. Military's responsibility to take care of and compensate well, any soldier or resident they may have harmed.

If widespread contamination is discovered, the army should build us a new hospital or pay to relocate those who care to leave. Please address how the NRC will include these requirements in permitting any kind of 'license' or mandating any remedial program.

Why is it on us the citizens to prove the extent of the contamination?

Hawai'i residents and other Americans across the country are counting on the NRC to protect them -Please get us some reliable, indisputable monitoring and be accountable for your actions and for your duty to protect citizens who already know the truth about how dangerous D.U is.

D.U. actually stands for 'Don't Use'. Since it has been used and now we are left with the problem that it has a half-life of 4.5 billion years, we are asking NRC not to rubber stamp our island as a nuclear waste dump. Please 'Kokua' and protect the people.

Jasper Moore
Hilo Resident

Attachment 26

Hayes, John

From: shannon rudolph [shannonkona@gmail.com]
Sent: Friday, October 23, 2009 12:57 AM
Subject: ***NRC : Comments

Additional comments to the NRC:

Aloha Mr. Hayes,

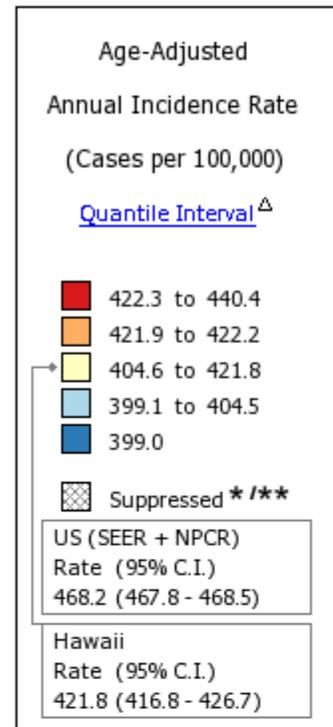
Thank you for coming to Hawai'i to address the serious issue of depleted uranium in our state.

I am a very concerned resident. I look at the map below and ask - WHY?

Incidence Rates[†] for Hawaii, 2001 - 2005

All Cancer Sites

All Races (includes Hispanic), Both Sexes, All Ages



Created by statecancerprofiles.cancer.gov on 10/22/2009 11:34 pm.

[State Cancer Registries](#) may provide more current or more local data.

Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries ([for more information](#)).

[†] Incidence rates (cases per 100,000 population per year) are age-adjusted to the [2000 US standard population](#) (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as [modified](#) by NCI. The US populations included with the data release have been adjusted for the population shifts due to hurricanes Katrina and Rita for 62 counties and parishes in Alabama, Mississippi, Louisiana, and Texas (See [US Population Data - 1969-2005](#) for more information.)

^Δ Number of intervals has been [modified](#) due to data distribution.

* Data have been [suppressed](#) to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 cases were reported in a specific area-sex-race category.

** Data have been [suppressed](#) for states with a population below 50,000 per sex for American Indian/Alaska Native or Asian/Pacific Islanders because of concerns regarding the relatively small size of these populations in some states.

National Cancer Institute/U.S. National Institutes of Health

[State Map:](#)

<http://statecancerprofiles.cancer.gov/map/map.withimage.php?15&001&001&00&0&1&0&1&6&0#map>

Out of 18 categories, Hawai'i Island has the highest cancer rate for ten of the different cancer categories. For the nine bases requesting "Permits to Possess" DU from the Nuclear Regulatory Commission, seven out of nine have the 1st or 2nd highest cancer rates in their respective states.

According to National Cancer Institute web site - here are the overall cancer rates for these counties.
(<http://statecancerprofiles.cancer.gov/map/map.noimage.php>)

NRC List:

Fort Benning, Georgia (* Chatahoochee County- 2nd highest category in state)

Fort Campbell, Kentucky (Christian - lowest)

Fort Carson, Colorado (El Paso - 2nd highest)

Fort Hood Texas (Bell - 2nd highest)

Fort Knox Kentucky (Meade- 2nd highest)

Fort Lewis Wash. (Pierce- 1st highest)

Pohakuloa/PTA Hawaii (1st highest)

Schofield Barracks O'ahu (2nd highest)

Fort Riley Kansas (Geary- no data)

fyi: Jefferson Proving Ground (Jefferson/Ripley - 2nd highest)

Yuma " (Yuma - 4th highest)

Aberdeen " (no data)

(Vieques, Puerto Rico high ? - some say up as high as 52%)

Now my question is - isn't it the job of the NRC to gather ALL of the latest facts pertaining to the bases requesting "permission to possess" a nuclear waste dump?

Doesn't it seem to you, that you should look more closely at these unusually numerous health risks for these counties? Are the cancer rates high because of airborne depleted uranium oxides? Residents would like to know FOR SURE, in fact, our local newspaper, West Hawaii Today, did a poll recently, here are the results:

WHT poll results: Do you believe the army about depleted uranium on Pohakuloa?

23% - 135 votes said they believe the army and are not concerned about their health.

76% - 445 votes said they want independent testing for DU

A full 58% - 339 votes said they do not believe a word the army says

The head of our State Dept. of Health, Radiation Branch, says, "the cancer rates are high in Kona because everyone is old." At the time, the average age was thirty seven.

Most residents don't trust the army to test their own "hen house" and we are counting on your agency to get us some monitoring we can count on. Can you do this?

I know I was told by your agency, "this isn't our dept." and that I should contact the Agency for Toxic Substances and Disease Registry. The people living near the former military range of Vieques, Puerto Rico said, this agency's report on their island was bogus and they are asking for the report to be done over, as their cancer rates are reported to be very high, also; some doctors say 52% higher.

I am asking you, ... begging you, for a full E.I.S. of this serious problem and if what many residents suspect to be true is found to be so - with independent monitoring, ...to start the de-commissioning and clean up process at Pohakuloa, Schofield, and other training ranges across the country in possession of DU.

I would also like to ask for a formal hearing but know you make the fifteen page process very difficult and cumbersome for the average individual.

Hawai'i residents and other Americans across the country are counting on the NRC to protect them - you are our only hope. Please don't allow us to be used as Guinea Pigs and please get us some reliable, indisputable monitoring - like... yesterday.

Mahalo,
Shannon Rudolph
P.O. 243 Holualoa, Hi. 9625

Nuclear Regulatory Commission testimony: 8/26/09

King Kamehameha Kona Beach Hotel 6pm Wed.
Hilo -6pm 8/27 Hilo Hi. School 6pm Thur.

Aloha,

Thank you so much for coming to our island to help us try to figure out this mess that the army wants to leave us. I'm no scientist, I didn't read the license and probably wouldn't understand half of it. What I am is, a very concerned resident who has done quite a bit of research and is very worried for my community. I come to you begging for some straight, verifiable answers to residents questions on depleted uranium at the Pohakuloa Training Range and elsewhere in Hawaii.

I can only put my comments in layman's terms, and I relate to it best, this way; have you every had a friend that you've had to cut loose because they were a pathological liar? You know you can't trust them and they will eventually rope you into their trouble so you have to cut them loose from your life. This is how I and a couple hundred of my fellow residents feel about the military at PTA and I suspect, more than a few O'ahu residents feel this way, too.

To put this into context historically, many times the military has been unable or unwilling to tell the truth to the American people who finance them. For example; I am re-reading a book by Dr. Barbara Rose Johnston, titled "Half Truths-Half Lies, Confronting The Nuclear Legacies of The Cold War".

I realize this type of radiation is from a different source but the same thread runs through these examples. From 1945 to 1963, a group of 400,000 Atomic Veterans were created who are either being minimally compensated or are dead because of nuclear testing. At first, the military told them they were crazy and it took those left alive decades to be compensated.

Our own neighbors from the Marshall Islands had to be relocated to our island because their islands have been contaminated forever; they can't go home again. It is documented fact that we, our military, even used South Pacific Islanders as Guinea Pigs by actually giving them "radiation pills" and told them it was medicine, just to study their demise.

Same with Agent Orange, sick U.S. soldiers fought for decades to be compensated, all the while being told they were nuts. The same with sick soldiers returning with Gulf War Syndrome, the powers that be denied and denied that there was a problem but finally had to admit that there was.

Now bare with me, all of these examples have a common thread.

In 1967, under projects 112, SHAD, and Test Red Oak, our military did chemical and biological testing in our forest reserve north of Hilo, spreading Sarin Gas and other known carcinogens near uniformed residents - breaching all ethical principals and informed consent - using us as Guinea Pigs and telling local officials they were doing "weather testing"; many other similar stories are known throughout the U.S.

None of these historic examples seem related but a common thread runs through them all. Lies. By the military

whom we pay to protect us. We have 824 plus, contaminated military sites at inactive bases in Hawai'i, not even counting active bases such as Pohakuloa; seven are superfund sites and they are doing very little to clean up any of it. This is not my idea of good land stewardship or of good neighbors.

Now, in more modern times, the army swore for years, that they never used depleted uranium in Hawai'i until an Earthjustice attorney found the smoking gun in a pile of correspondence while working on another case. Finally, the army admitted that yes, they did use it.

Shortly after this discovery, I started reading about our nuclear legacy; the more I read the more worried I became for our community.

Epidemiologist and nuclear researcher, Dr. Rosalee Bertell, wrote that "there are over one million "alpha bullets" released per day from processed uranium the size of a period at the end of a sentence." (for 4.5 billion years) I have read that burned or aerosolized uranium dust is easily inhaled or ingested and easily goes airborne with the wind to be resuspended again and again.

I point out three studies that I am familiar with, done by Dr. Chris Busby and Dr. Dan Fahey, that say depleted uranium travels on the wind; I am not talking about natural uranium or "chunks" found on the ground but aerosolized nanoparticles smaller than a virus.

I was across the highway from Pohakuloa in May 2007, with other residents watching radiation monitors for an hour and a half staying at, or below normal background radiation levels of 5 to 20 counts per minute. A visible "dust devil" blew up off the training range and traveled directly over the monitors and all of us. As the dust blew over us, the radiation monitors spiked 4 times, up to 75 cpm. We were horrified.

Our State Dept. of Health was contacted and they came up the mountain to measure. Their protocol for measuring radiation was to practically hold their monitor out the window of their car for a few moments and declare safe levels, which they immediately reported to the Honolulu Advertiser. Cabrera Services was hired to monitor, and flew over a small part of Pohakuloa for a couple of days in a helicopter, which residents think wasn't nearly enough.

Now purportedly, we have seen a 1992 study of the Hawai'i cancer map, by the State Public Health Dept. that shows Kona to have one of the two, highest cancer rates in the state, the other being Pearl Harbor; a giant superfund site. We have no heavy industry here to account for this high rate and no official wants to talk about it.

When asked, the State Health Dept. official for the Radiation Branch said the reason the cancer rate in Kona is so high was because everyone in Kona was old. The average age at the time was thirty seven. Several nurses in Kona say there has been an explosion of Thyroid problems here, also. I myself have a medical problem called Trigeminal Neuralgia, a neurological disorder said to affect 1 in 35,000. I know, or have heard of similar symptoms of shocks in the face of twenty two people in my small area.

I've talked to a few island hunters who have report seeing unusual tumors in sheep and goats near the perimeter of Pohakuloa. I have no idea if any of these problems have anything to do with depleted uranium but its seem somewhat unusual that all of these medical problems are also known symptoms of radiation exposure, or "markers". This is why we sincerely ask for your help to see if any of these problems in humans or animals are related to ingested or inhaled DU.

We do know that a similar situation is happening on a similar island in Vieques, Puerto Rico, the town near a

former, now shut down, navy training range. A 1990-94 study by the Puerto Rico Dept. of Health said cancer rates were 26.9% above the Puerto Rican average. Dr. Rafael Rivera-Castano said this study was out dated and estimated that cancer rates had risen to 52% over the average by 2001.

Residents have gotten no answers they feel are reliable regarding questions we have about DU on our mountain, we've mostly gotten stalling, misinformation, and disrespect. We need some straight answers to our questions and residents are counting on the NCR to protect us as one of our last lines of defense against the military who have a historically poor record of telling the truth. Many residents think many more radiation weapons systems have been used beyond the Davy Crockett, tail fin spotter rounds.

I ask that in addition to absolutely foolproof, verifiable, long term, air, soil, and water monitoring, preferably by independent professionals, for all Hawai'i bases that are contaminated, I plead with you to do some independent testing of sick, life long, Hawai'i residents living downwind, in addition to wildlife near perimeters. It is well past time that we have some straight answers from someone.

I know of one Hawai'i resident who had them self tested for DU at the same lab the British Government used, the test came back with traces of DU but the lab couldn't differentiate between whether it was an old or recent exposure. This lab was shut down shortly after this test, and some residents find this quite curious. This test case didn't count for Hawai'i because this person had only lived here for thirty five years and also grew up next to a similar training range on the mainland.

Let's cut to the chase, IF depleted uranium is discovered in any life long resident or animal, it means the radiation is migrating off of the property. I ask that you make the army follow their own regulation AR 700-48 according to regulation author, Dr. Doug Rokke; to shut down these Hawai'i training areas now, clean up every speck of DU, and take care of and compensate well, any soldier or resident they may have harmed. Personally, I think if widespread contamination is discovered, the army should build us a new hospital or pay to relocate those who care to leave.

I mean no disrespect, but I must tell you, many residents believe that the NCR is in "cahoots" with the military on trying to keep a lid on this issue; I hope and I pray this is not the case. You folks are one of our last lines of defense to get the truth of whether or not we are in danger; the burden of proof should not fall on the residents of our island.

I dearly hope you will take all of our comments seriously, hold the military's feet to the fire on the DU issue, and babysit their every move as your sacred duty to us all; the alleged involuntary Guinea Pigs of the Pacific.

Shannon Rudolph

An open letter to my Congressional delegation

Aloha Dan, Dan, Mazie, and Neil,

I saw this tiny correction in WHT on 9/24, it said, "Environet Inc. is being paid to remove World War II military ordnance from 2,950 acres near Waimea." The previous article on 9/23 stated, "The total cleanup of the former Waikoloa Maneuver Area to remove what the military calls Munitions and Explosives of Concern (MEC) is expected to cost \$680 million more". (Not including the \$152 million already spent, for a total of \$832 million to clean up Waikoloa)

"Because of the size, complexity and cost of the Waikoloa response, it should be considered a long-term action, potentially spanning more than 50 years," states an April 2008 "information paper" the Corps' Honolulu office

supplied.

\$70 million to clean up 3,000 acres comes to \$23,000 an acre. With \$832 million to spend on Waikoloa's 123,000 acres at \$6,500 per acre, would total 2.3 billion. The Kaho'olawe per acre price was \$18,000, so the clean up costs keeps rising.

Up the mountain, at Pohakuloa, we have potentially 100,000 acres that may be contaminated with conventional weapons, not including the 33,000 acre Parker Ranch acquisition. At that price the possible total to clean up PTA could be well over 2 billion dollars, not counting the extremely expensive, additional costs of radiation clean up - if that's actually possible. I have been told the old Waikoloa training area was only used for three years and the Pohakuloa Training Area has been used for sixty years, which will dramatically increase the final cost.

Dan Inouye said, "I look forward to more announcements of additional cleanup efforts on the Big Island." Mayor Kenoi said, "I am extremely pleased to see this important work move ahead under this contract. It represents a significant investment that will make our island safer for residents and visitors, and will provide good jobs for County of Hawai'i residents who will be employed on the project."

While it would seem more rational to not make such a humongous mess in the first place and save ourselves a bundle, there is opportunity in conflict. I see a win-win here, with a new "clean up" industry being born on Hawaii Island to cash in on some of this free money. Many residents could be trained for long term jobs at a good wage, plus health care benefits, and also sent out to work on other Hawaiian Islands, not to mention good jobs for the folks at the Environmental Protection Agency; the Nuclear Regulatory Commission; the Center for Disease Control, the Agency for Toxic Substances and Disease Registry; the Justice Dept.; the Dept. of Interior; and related services or agencies. That's a lot of hotel rooms to fill up and would be a boon to our economy.

We can learn a lot from our sister island of Vieques, Puerto Rico. All it would take to jump start this new industry is for our congressional delegation to ask President Obama to decommission Pohakuloa rather than having the NRC waste their time and budget on giving the Army a "license to possess" a nuclear waste dump on our island, they could get ahead of the game by decommissioning PTA now. And by the way, you can let the NRC know your thoughts on this if you comment by Oct. 27th, to: john.hayes@nrc.gov Ask for an E.I.S. and decommissioning for Pohakuloa.

According to a recent West Hawaii Today poll, 76% of the voters said they wanted independent testing of Pohakuloa, rather than the army doing the radiation monitoring. 58% said they don't believe a word the army says. Since few residents believe them, let's just forget about the Army testing their own hen house and just start cleaning it up; Lord knows we need these new employment opportunities.

Our Representatives in D.C. have been strangely silent on the clean up of Pohakuloa, this would be their chance to be heroes, save our economy, and clean up all contamination on our training ranges. This could happen fairly quickly if our Congressional delegation put their powerful heads together to get the ball rolling and called in some favors to make this happen; this is a fantastic, long term employment project and its certainly "shovel ready".

Besides the 25 residents already trained in ammo retrieval, we can begin this fledgling island industry now if our D.C. reps could put up \$100,000 for equipment, and begin the training and certification process of residents for radiation monitoring; we would more easily trust our own residents to give us the truth.

This is a formal petition and plea to Senators Dan Inouye and Dan Akaka, to Reps. Mazie Hirono, and governor hopeful, Neil Abercrombie, let's decommission, clean up Pohakuloa, and make some big money on this gravy train; its the "sustainable" and "green" solution to our problems.

Shannon Rudolph - Kona

Passed by the Hawai'i County Council: July 2nd, 2008

(We have also had help from some of our state legislators)

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.

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We cannot hope to end violence against each other until we end our violence against the earth. Wendell Berry

Attachment 27

Sexton, Kimberly

From: Hayes, John
Sent: Wednesday, October 14, 2009 8:25 AM
To: Barbara Moore
Subject: RE: Please Disallow DU at PTA

Ms. Moore,

I have forwarded your request for a hearing to the Office of the Secretary as they are responsible for handling hearing requests.

Thank you for your comments. I will add them to the comments received from others. Your comments and the others will be evaluated by NRC project team responsible for the review of the Army's DU possession only license application.

Regards,

Jack

From: Barbara Moore [mailto:dfly@dragonflyranch.com]
Sent: Wednesday, October 14, 2009 2:57 AM
To: Hayes, John
Subject: Please Disallow DU at PTA

Aloha Mr. Hayes,

As the president of the Big Island Health and Wellness Alliance (BIHWA) I am writing to thank you for listening to the requests of the people of this island asking that you DISallow Depleted Uranium on our Sacred Aina.

Furthermore, I am begging you to not pretend to be hearing our heart-felt pleas but rather respond to our need to safe guard our guests visiting this island, the people who reside here, and our noble soldiers, from this deadly substance.

I formally request that there be a public hearing that allows our residents the right to protect themselves from this invasive substance that destroys the health of our residents.

CLOSE DOWN ALL LIVE FIRE AT PTA, STOP THE BOMBING AND REMEDIATE THE AREA IMMEDIATELY.

I attended your meeting and read your literature assuring us that DU is nothing for us to worry about.

I can tell you from personal experience that Depleted Uranium IS dangerous. Ever since I protested, on a fateful day in 2007, against DU at PTA when I was

caught in a dust devil as I looked at a meter spike in the dangerous zone, I have been experiencing serious health problems resembling issues that develop after exposure to depleted uranium. I won't bother going into detail but suffice it to say that I do not think I would be challenged with chronic lymphoid leukemia if you and your team of experts were to honestly assess the danger of DU years ago and had then put a stop to the live fire, bombing, and Stykers moving DU dust into the precious air that Big Islander's breathe.

As you heard from the statistics of this area, cancer has increased for us "down winders" so that I am not the only victim suspected of suffering from the effects of DU on this island.

The words that popped out of my mouth when I was speaking at the meeting you arranged for us in Kona was, "Are you dupes?" When I saw your facial responses to my question, I regretted offending you by using those harsh words. I came home and looked up the meaning of "dupe:" an "unknowing" dupe is a victim of deception. The verb, "to dupe", means "to deceive". Since you are educated and intelligent people, I can't help but believe that you are fully aware of how lethal DU is to humans, plants, animals, the planet. Are you deceiving yourselves when you try to tell us that allowing DU on our island is not hazardous to our health and the well being of our precious land, water, and air?

You now have the opportunity to make a stellar decision that goes against all the brainwashing you have been exposed to and are attempting to foist upon us. After the meeting, when I shook your hands, I told you that I would appreciate your taking an honest stand that could cost you your job. None of you seemed thrilled at that possibility. I know times are tough and you have a high paying job. But at what cost to your integrity when you rubber stamp every request you have ever gotten asking you for permission to possess the most destructive substance on the planet: the material used in Weapons of Mass Destruction, silently killing even humans it was not intended to kill for four and a half million years to come ? Wouldn't it be a new experience to look at yourself in the mirror and say, "Today I'm going to go on record for making the RIGHT decision, the sane decision, the decision that protects our citizens from the proliferation of this lethal material. I'm going to say NO to allowing Depleted Uranium in the Aloha State."

Every one of you can actually use your own brain and realize that you have an opportunity to take a major historical step—one that could positively affect your life and that of your children to follow—by going on record as refusing the army the right to allow Depleted Uranium on these islands. REMEDIATE is the key word I wish for you to embrace. **Say NO to allowing the military a**

permit to possess Depleted Uranium.

I repeat:

CLOSE DOWN ALL LIVE FIRE AT PTA, STOP THE BOMBING AND REMEDIATE THE AREA IMMEDIATELY.

Sincerely,

Barbara Moore

--

*"In the Sweetness of Friendship,
let there be Laughter
and the Sharing of Pleasures "*
Khalil Gibran

Barbara Ann Kenonilani Moore

President of Big Island Health and Wellness Travel Alliance

soul proprietor of Dragonfly Ranch: HEALING ARTS CENTER

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
U.S. ARMY INSTALLATION COMMAND) Docket No. 40-9083
)
(Depleted Uranium at Pohakuloa Training)
Area & Schofield Barracks, Hawai'i))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "NRC STAFF'S RESPONSE TO REQUESTS FOR HEARING AND PETITIONS TO INTERVENE FILED BY COREY HARDEN, LUWELLA LEONARDI, ISAAC HARP, JIM ALBERTINI, AND OTHERS" and a Notice of Appearance for Kimberly Ann Sexton in the above captioned proceeding have been served via the Electronic Information Exchange ("EIE") this 6th day of November 2009, which to the best of my knowledge resulted in transmittal of the foregoing to those on the EIE Service List for the above captioned proceeding.

Executed in Accord with 10 CFR 2.304(d)

Brett Michael Patrick Klukan
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U.S. Nuclear Regulatory Commission
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