

Miller, Debra

From: Cory Harden <333cory@gmail.com>
Sent: Monday, March 23, 2015 4:59 AM
To: Snyder, Amy
Subject: re. Mar 24 DU meeting
Attachments: ISSUE DU 2015 3-24 questions Harden.docx

**Hello Amy,
Attachment is identical.
Please acknowledge receipt.
thanks, Cory**

QUESTIONS FOR MARCH 24, 2015 ARMY/ NRC DU MEETING
from Cory Harden, Box 10265, Hilo, Hawai'i 96721 808-959-7747

1. Isn't it time for the NRC to take over handling the DU?

The Army didn't know, or didn't tell, that it had DU till after citizens announced the discovery. In the ten years since that, the Army has been addressing DU hazards at a snail's pace, while raising numerous questions and concerns from citizens and NRC.

"...the NRC is quite concerned with the Army's progress in satisfying license conditions" and the length of time the Army is taking to "add the remaining 15 [DU] sites to its license". NRC expresses concern for "public health and safety and protection of the environment". NRC says they are using "license conditions, as opposed to issuing orders to the Army" but that NRC needs "resolution on licensing issues in timely manner." [*letter from NRC to Army, 2-10-15, ML150112A427*]

It's been a year since NRC "identified the technical issues", but the Army is still doing air sampling incorrectly. [*letter from NRC to Army, 2-10-15, ML14353A412*]

2. Has the Army curtailed any activities while working on NRC requirements?

What is the Army doing to prevent airborne DU dispersal while air sampling (see above) is still inadequate?

Have high explosives been fired in identified DU areas, in Hawai'i or elsewhere, since the original DU discovery? NRC said so far the Army has "provided insufficient information" about whether "DU on the ranges is insufficient to become airborne and cause an exposure hazard" during firing of high explosives. [*"Additional Guidance", 2-27-15, ML 15061A77*]

3. There is evidence that 2,000 spotting rounds were used at Pohakuloa. The Army only found a few fragments. Where are the rest?

There are three lines of evidence for over 2,000 spotting rounds being fired at Pohakuloa.

a - Manuals

"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*]

“Killian if you go through the training manuals of the era...it would require more than 714 rounds over an 8 year period of time to qualify the requisite amount of crews...”

Councilmember Hoffmann Is there any possible support for a figure of 2,000 spotting rounds at PTA?

Killian If you, if you do the math, if you extrapolate the math with the, the contemporary training manuals I think you'd come up with number of 2,050.”

[from my transcript of the official DVD of Hawai'i County Council Public Works & Intergovernmental Relations Committee meeting, 2-3-09]

b - Pistons

“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]*

c - Archive Search Report

“Total rounds verified shipped from Oahu from Lake City Ordnance Plant were 714 rounds... It is highly probable that additional stocks of the Cartridge, 20 mm Spotting M101 were order [sic] from one of the Ordnance Depots (Letterkenny or Pueblo) during the six active years of the Davy Crockett Weapon System in Hawaii.” *[Archive Search Report On the Use of Cartridge, 20mm Spotting M101 for Davy Crockett Light Weapon M28, Schofield Barracks and Associated Training Areas, Islands of Oahu and Hawai'i, Army Corps of Engineers, May 2007, p. 41]*

4. How is new data about water depth being factored into risk assessment for Pohakuloa?

In 2010 the Army said “Currently, there is no information to show that either groundwater or surface water near the site may have been affected by historical activities at the PTA. Additionally the size of the DU fragments and the depth of ground water is sufficiently deep so as to preclude migration; therefore, these media are excluded from further evaluation in the BHHRA.... Groundwater monitoring and production wells that have been drilled closest to the PTA properties suggest that freshwaters...are at least 300 m below ground surface...” *[Final Pohakuloa Training Area Baseline Human Health Risk Assessment for Residual Depleted Uranium, Cabrera Services, June 2010]*

NRC cites “the depth to the water table” as one of its “parameters of interest” *[“Additional Guidance”, 2-27-15, ML 15061A77]*

“Don Thomas [University of Hawai'i scientist in charge of the first water drilling project in the area] said the well drilled at about the 6,400-foot-elevation at the Pohakuloa Training Area, in the vicinity of Mauna Kea State Park, found water more than a mile above sea level... In one case, perched water [was found at] 500 feet in depth ...”

[\[http://bigislandnow.com/2014/02/13/water-in-saddle-higher-more-plentiful-than-expected/\]](http://bigislandnow.com/2014/02/13/water-in-saddle-higher-more-plentiful-than-expected/)

This first project found water “about 500 feet below the surface”.

[“Higher Waters”, Hawai'i Tribune-Herald, 2-18-14]

The Army is funding the second drilling project, the Humu'ula Saddle Hydrologic Study Project, to seek water to supply Pohakuloa. *[“Large fresh water supply discovered by UH researchers on Hawai'i Island, University of Hawai'i News, 1-23-15,* <http://www.hawaii.edu/news/2015/01/23/large-fresh-water-supply-discovered-by-uh-researchers-on-hawaii-island/>*]*

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