

APPENDIX C. PUBLIC HEARING MATERIALS

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1 SUMMARY OF COMMENTS ON THE DRAFT PROGRAMMATIC EIS

In the 2011 Draft Programmatic EIS (Draft PEIS), the Infantry Platoon Battle Course was analyzed as part of a larger Infantry Platoon Battle Area (IPBA), which included a Military Operations on Urban Terrain (MOUT) Assault Course and a live-fire Shoothouse facility. Due to funding constraints however, the MOUT Assault Course and Shoothouse are no longer part of the present project. Therefore, the Army has determined that the IPBC will be the only part of the IPBA analyzed at the project level in this document. The MOUT Assault Course and Shoothouse are now designated as future projects to be located eventually in the general vicinity of whichever alternative site is chosen for the IPBC.

This Final EIS is a project-specific EIS addressing the construction and operation of the IPBC only; the programmatic portion of the document, including the MOUT Assault Course and Shoothouse projects, have been deleted. Further National Environmental Policy Act analysis will occur when funding becomes available for the programmatic projects and alternative sites are identified. The responses to comments have been prepared based on these changes to the Final EIS.

1.1 DRAFT PEIS COMMENT PERIOD AND PUBLIC HEARINGS

The Notice of Availability (NOA) for the Draft PEIS was published in the **Federal Register** on October 14, 2011. The NOA described that the Army's draft document addressed the potential environmental impacts associated with modernization activities at PTA. In addition, the NOA identified the dates and locations for the public hearings on the island of Hawai'i and the 45-day comment period timeframe (October 14 – November 30, 2011). The Army published notices announcing the availability of the Draft PEIS for review and public hearing information in local daily newspapers to coincide with the publication of the NOA in the **Federal Register**. The notices were published in the West Hawai'i Today and Hawai'i Tribune-Herald on October 14-15, 2011.

The Army held public hearings over a two-day period on November 8, 2011, at Aunt Sally Kaleohano's Luau Hale, and on November 9, 2011, at the Waimea Elementary School cafeteria. Similar to the scoping meetings, each public hearing was preceded by an open information session allowing citizens to review posters related to the project with EIS team members available for one-on-one conversations to discuss their concerns. Public comments were accepted by the Army in either written format or oral testimony. A total of 71 people attended the public hearings with 33 individuals providing oral comments or private testimony. The Army also received over 30 written comments during this public comment period. Appendix B of the Final PEIS includes the comments received.

The comments received during the comment period were reviewed and evaluated to determine how best to revise the content of the Draft PEIS for development of the Final EIS. Comments received were grouped by general categories or themes. Table C-2 summarizes the issues raised by the public from the oral statements and written comments.

TABLE C-2 Summary of Issues Received During the Comment Period

Issues/Concerns
Impacts to wildlife and protected plant and animal species
Hazardous Materials (e.g. Depleted uranium (DU), UXO, chemical weapons) concerns with questions on cleanup status of ongoing restoration projects
Particulate matter and health assessment clarifications
Depleted Uranium (DU) (radiation/dust control/health risks)
Noise impacts to wildlife, parks, citizens, along with aerial activities for range missions
Increased PTA expansion (boundary/training)
Impacts to cultural and archaeological sites in PTA action area
Cumulative analysis/impacts considering all military operations on the Island.
Hunting at PTA
Alternative analysis /surveys
Native Hawaiian Sovereignty
Wildfire management
Groundwater and stormwater management
Viewshed impacts / light pollution
Sustainability goals and objectives for PTA
Greenhouse gas emissions

2 ANALYSIS OF COMMENTS

The general public comments for the proposed Draft PEIS were split between the issues and/or concerns mentioned in Table C-2 and support for our Soldiers and their Families. Some of the key areas of concern with individuals and agencies appear to be the lack of information provided in the Draft PEIS on Cultural and Biological resources for all alternatives within the document. In addition, they have health concerns about DU and hazardous waste cleanup site and lastly, the majority of commenters raised the issue of noise.

The responses to individual and/or agency questions will be taken into consideration during the drafting of the Final PEIS.

3 COMMENT STATEMENTS AND RESPONSES

This section presents the comment statements received by the Army on the 2011 Draft PEIS. The Army-prepared responses take into account the revised project description for the Final EIS, which is the construction and operation of the IPBC Range. The comment statements are numbered sequentially to facilitate references to them in Table C-1 Index of Commenters. The responses are also numbered sequentially for each commenter.

3.1 FEDERAL AGENCIES

Comment F-1: Loyal Mehrhoff, Field Supervisor, U.S. Department of Interior, Fish and Wildlife Services

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Programmatic Environmental Impact Statement (PEIS) for Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area at Pohakuloa Training Area (PTA), Hawaii. We have reviewed the PEIS pursuant to the National Environmental Policy Act (NEPA) of 1969, the endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 *et seq.*), as amended, and the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as amended (MBTA).

The U.S. Army is proposing to modernize the PTA ranges, training support infrastructure, and training support facilities. The first proposed modernization project at PTA is construction and operation of an Infantry Platoon Battle Area (IPBA). Impacts from future modernization projects will be analyzed under a tiered NEPA process. In these comments we focus on potential impacts from the IPBA, which have the potential to adversely affect listed plants, the Hawaiian hoary bat (*Lasiurus cinereus semotus*), and the Hawaiian goose (*Branta sandvicensis*), and lead to increased fire risk and spread of invasive species.

The PEIS does not contain sufficient information regarding construction and operation of the IPBA for us to assess the impacts of the first proposed modernization project on federally listed species, critical habitat, migratory birds, and other Federal trust resources. The PEIS does not provide information to allow comparison of the different proposed IPBA alternatives and their potential impacts on natural resources. We recommend providing additional specific information in the following areas in the PEIS for each alternative: 1) survey results of what protected species are located within the project area; 2) a detailed analysis of the potential impacts of the action on natural resources; and 3) proposed avoidance and minimization measures and mitigation actions.

We recommend that the Army select the alternative that minimizes impacts to listed species, and provides comprehensive measures to avoid an increase in fire risk or spread of invasive species.

It is also our understanding that a draft Biological Assessment for this proposed action and for reinitiation of the 2003 Biological Opinion for routine Military Training and Transformation of the 2nd Brigade 25th Infantry Division, U.S. Army Installations, Island of Hawai'i [Service file 2008-F-0278 (2008 reinitiation)] will be provided soon for our review, with the intention of entering into a formal section 7 consultation pursuant to the ESA.

Response 1 to Comment F-1:

On September 7, 2012, the Army provided the USFWS all required information to initiate consultation for the proposed IPBC at the Western Range Area (preferred alternative). The USFWS concurred with initiation of formal consultation and committed to complete the Biological Opinion (BO) by December 3, 2012, contingent on timely internal Army approval of conservation actions for the Hawaiian goose. On January 11, 2013, the USFWS issued its BO in response to the Army's August 13, 2012, request for formal consultation pursuant to the ESA of 1973 (16 USC 1531), as amended (ESA). A copy of the BO, which is included in Appendix G of the Final EIS, provides a summary of the Army's consultation history with the USFWS for this project. Additionally, surveys for federally threatened and endangered plant species were conducted by the Army on each of the two proposed locations for the IPBC. Summaries of the plant surveys and the results of the 2013 BO, including conservation measures, have been added to Sections 3.9 and 4.9 Biological Resources of the EIS. Conservation measures include measures to avoid an increase in fire risk or spread of invasive species.

Requirements of the 2008 BO for Hawaiian geese have expired and are replaced by those contained within the 2013 BO. The 2013 BO provides conservation measures for five listed plant species and Hawaiian geese. After reviewing the current status, environmental baseline, effects of the proposed

action, and cumulative effects, it is the USFWS's BO that implementation of the proposed actions discussed are not likely to jeopardize the continued existence of any species (Asplenium peruvianum var. insulare, Kadua coriacea, Silene hawaiiensis, Spermolepis hawaiiensis, Zanthoxylum hawaiiense, and Hawaiian goose) covered in this 2013 BO. The actions discussed herein included use of every training range installation-wide at PTA for up to 365 days per year and with an unlimited number of Hawaiian geese present in Surface Danger Zones while troops are actively training. The USFWS acknowledges the receipt of a no effect determination for Hawaiian hawk for all anticipated military training at PTA on January 4, 2013. Additionally, based on the avoidance and minimization measures provided in the 2013 BO, the USFWS concurs with the Army's biological determination that the proposed IPBC project may affect, but is not likely to adversely affect three federally listed species: the Hawaiian hawk, Hawaiian hoary bat, and Hawaiian petrel.

Comment F-2: Cindy Orlando, Superintendent, U.S. Department of Interior, National Park Service

This letter is in response to your agency's request for comments regarding the Draft Programmatic EIS for Modernizations of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA) on Hawai'i Island. Our primary concerns lie specifically with the potential for impacts from activities adjacent to Mauna Loa Volcano and any potential impacts to Hawai'i Volcanoes National Park. It is clear from the document that the facilities at PTA are outdated and need modernization. We appreciate the opportunity to offer the following comments regarding information provided or lacking in the EIS.

Noise, Soundscapes, and Wilderness

In several places it states that an impact level was determined to be 'less than significant' but the required analysis was not done to determine this level of impact. For example it is stated that the noise-related impact level for live fire training impacts is less than significant, yet there was no modeling completed for the noise and it is stated that you would analyze the impacts if the preferred alternative is not ultimately selected (9pg 4-32, sections 4.5.4.3 and 4.5.4.4). The modeling and analysis needs to be completed on all the alternatives, not just your preferred alternative. In NEPA analyses, preferred alternatives are typically arrived at due to their advantages over the other alternatives (e.g. less impacts usually). Yet, in this document, the impact levels were not assessed for the other alternatives, so there is not a sound basis for not selecting one of the other alternatives. Please complete the appropriate impact analysis on all the alternatives.

Response 1 to Comment F-2:

The Army is coordinating with the NPS on a number of issues and will work with the NPS to understand better the concerns related to detrimental effects to visitor experience resulting from implementation of the Proposed Action at PTA in Hawai'i. The Army completed modeling of potential noise impacts at both alternative locations for the proposed IPBC: the Western Range Area (preferred alternative) and Charlie's Circle. A copy of the noise modeling results are included in Appendix F of this Final EIS. In March 2011, the U.S. Army Public Health Command (USAPHC) performed an Operational Noise Assessment for Proposed Infantry Platoon Battle Area at Pōhakuloa Training Area, HI (USAPHC, 2011a). The USAPHC modeled CDNL contours for the proposed IPBC in the Western Range Area. In May 2011, the USAPHC prepared an addendum to its March 2011 analysis for the hardening of targets at the proposed IPBC in the Western Range Area to support aerial gunnery training (USAPHC, 2011b). In September 2012, the USAPHC prepared a revised Operational Noise Assessment for Proposed Infantry Platoon Battle Area at Pōhakuloa Training Area, HI (USAPHC, 2012). This analysis updated the May 2011 addendum results and incorporated an analysis of the proposed IPBC at Charlie's Circle alternative; reflected adjustments in the aerial gunnery training and non-standard ground based activity (such as Carl Gustav Recoilless Rifle FFV552 training practice round, .50 caliber sabot light armor penetrator tracer [SLAP-T], TOW Missiles [inert], AT-4 Rocket 9 mm training round, mortars, hand

grenades, simulators, and demolition charges) at both IPBC alternative locations. The USAPHC modeled noise contours for large and small caliber weapons use and aerial gunnery training at both IPBC alternative locations analyzed in this EIS. The noise levels associated with the Proposed Action were reviewed to determine if they were compatible with surrounding land use (both on and off-post) and if the addition of the proposed IPBC would change noise zones beyond the boundary of the installation. Except for small portions along Infantry Road the noise zones remain within the PTA boundary; along Infantry Road, Zone III extends less than 656 ft (200 m) beyond the boundary and within this area is forest reserve land. Figures 4.5-2 and 4.5-4 of the Final EIS show the Zone II and III noise contours for cumulative demolition and all large arms activities (existing General Range Area, proposed IPBC, and aerial gunnery operations). Although this expands the noise zones near the IPBC, the additional activity would have no significant adverse effect beyond the PTA boundary. Existing noise conditions are within Zone I; therefore, the noise impacts within the PTA are considered less than significant. Existing noise conditions are discussed in Section 3.5 and potential noise impacts from the proposed IPBC are presented in Section 4.5 of the Final EIS.

Aerial gunnery is described as only occurring three days per year as proposed. Please clarify if this frequency of use is expected for the life of the plan. Under noise impacts there is no consideration of impacts to sensitive wildlife species, only consideration of human impacts. According to Appendix E, the sound levels will be 60 dBA at 1/3 mile which could impact wildlife. The potential impact of noise on wildlife needs to be considered and mitigation identified as appropriate.

Response 2 to Comment F-2:

Attack gunnery training at PTA is typically an 18-day training exercise occurring three (3) times per year. Door gunnery training is conducted using UH-60 Blackhawk and CH-47 Chinook helicopters. Training with the UH-60 Blackhawk requires nine (9) training days conducted three (3) times per year. Training with the CH-47 Chinook requires six (6) training days conducted three (3) times per year for a total of 18 days.

Potential noise impacts on wildlife, particularly the Hawaiian goose, are summarized from the USFWS 2013 BO in Section 4.9. Biological Resources, and discussed at length in the USFWS's 2013 BO provided in Appendix G of the Final PEIS. In the 2013 BO, the USFWS assumes when noise is too loud or disruptive, Hawaiian geese will either leave the area or they are not losing any metabolic resources. The BO provides mitigation measures that the Army must implement installation-wide at PTA to protect and minimize impacts on the Hawaiian goose.

The Army's noise metrics are based on effects on human annoyance and are used for land-use planning. The noise contours shown in the EIS do not extend into NPS properties, as the adjacent land uses are owned by the state and by several estates and ranches (as shown in Figure 3.1-1). The noise report included in Appendix F of the Final EIS provides a figure depicting noise contours for the existing conditions at PTA. The following are the noise zones used by the Army in the noise modeling reports: Land Use Planning Zone (LUPZ): 57-62 dB CDNL, Zone I <62 dB CDNL, Zone II 62-70 dB CDNL, and Zone III >70 dB CDNL. Army Regulation (AR) 200-1 lists housing, schools, and medical facilities as examples of noise-sensitive land uses; these land uses are not recommended for Zone III.

Appendix E refers to a perimeter road route that the helicopters would travel for aerial gunnery exercises, but no map is provided to show this route. Please provide a map for this route. The appendix says 'may annoy those alongside the PTA boundary,' yet it discounts that there may be an impact because it is Forest Reserve and undeveloped. The document needs to consider potential impacts to recreational users and wildlife. Appendix E pages C-1 to C-4 does not include information on what the values are actually depicting other than it has to do with specific weapons and daytime vs. nighttime, it does not say if these values are calculated sound values (and what measure is used to capture that) or if it is referring to something else. Please include this information in the table.

Response 3 to Comment F-2:

Please also see the response to comment provided directly above. Helicopters would travel along Perimeter Road, a trail running alongside the perimeter of PTA, to transport Soldiers to and from PTA but not as a part of Army training exercises. Noise contours for existing conditions at PTA are shown in Section 3.5 of the EIS and in Figure 2 of the 2012 Noise Report in Appendix F. Units would continue to deploy to PTA to conduct training on mission essential and required pre-deployment tasks.

The noise model used for the ammunition and weapons listed in Chapter 2 for the IPBC takes into account a range of distances, heights, and weapons to determine the resulting anticipated noise. As noted in the response above, the Army's noise metrics are based on effects on human annoyance and are used for land-use planning.

The noise contours shown in the EIS do not extend into NPS properties, as the adjacent land uses are owned by the state and by several estates and ranches. PTA is surrounded mainly by state-designated Conservation Lands and private lands (Bishop Estate, Parker Ranch, and Waikii Ranch). Land uses in the areas include cattle grazing, game management, forest reserves, and undeveloped land. Forest land as defined in the Army's noise report as utilized for limited recreational purposes (i.e., hiking).

The National Park Service manages park soundscapes or “natural quiet” as a park resource, which is based on public law and is defined in NPS policy. In 2007, park studies revealed nearly two-thirds of surveyed visitors rank the ability to hear natural sounds as important to their enjoyment and appreciation of the park and three-quarters of these visitors equate annoyance and negative feelings with human-caused sounds including aircraft and vehicle noise (2007. *Social Science Research to Inform Soundscape Management*, Steve Lawson, Department of Forestry, Virginia Polytechnic Institute and State University).

Mauna Loa Volcano is part of the park's 123,100 acres of congressionally legislated wilderness. Known as the Mauna Loa Unit, this designation provides special protection to this area of Mauna Loa that is demarcated by the park boundary on the north and east sides of the park. We appreciate your selection of alternatives that avoid any impacts to designated park wilderness. Our concerns include the potential noise generated from ground activities and low flying aircraft that may be adjacent to or in close proximity to the park's designated wilderness. The primary wilderness trail for visitors to access the Mauna Loa summit and associated backcountry cabins run parallel to the boundary of PTA. The associated noise is unexpected for park visitors and would potentially limit opportunities for solitude that are protected under the Wilderness Act. The island's large expanses of lava produce landscapes that offer little sound shielding, creating long “time audibles” for human or mechanized sounds. In these areas, noise has the potential for creating an acoustic impact on wilderness users. We encourage you to address soundscapes in your analysis, or at a minimum, consider the impacts of noise on recreational users and wildlife not only within PTA but in the surrounding areas. We also request advance notice of aerial gunnery and live fire activities so that we may post information at trailheads and alert our backcountry office to better inform our wilderness users.

Response 4 to Comment F-2:

The Army's noise metrics are based on effects of human annoyance and are used for land-use planning. The noise contours shown in the EIS do not extend into NPS properties, as the adjacent land uses are owned by the state and by several estates and ranches (as shown in Figure 3.1-1). The Army conducted additional noise modeling including aerial gunnery and non-standard ground based weapon activity at both proposed IPBC locations. As discussed previously in the responses above, the noise modeling metrics are based on effects of human annoyance. The potential effects on wildlife from the proposed IPBC are addressed in the 2013 BO issued by the USFWS. Except for small portions along Infantry Road the noise zones remain within the PTA boundary; along Infantry Road, Zone III extends less than 656 ft (200 m) beyond the boundary and within this area is forest reserve land.

The USAG-HI works with the Military Services to provide media releases announcing advanced notice to newspaper and radio stations of upcoming training activities occurring at PTA. The USAG-HI PAO will coordinate with the National Park Service for notification of live-fire training activities occurring at PTA to provide notice to recreational users of the parks.

Although we understand that the DOD has developed their own noise evaluation programs, we question the sole reliance on community noise metrics and sensitivity to humans as the measure of noise impacts. As a nearby land manager, the boundary of Hawai'i Volcanoes National Park and designated Congressional wilderness on Mauna Loa lies less than five miles of the south edge of PTA. We are concerned with noise that could potentially travel through the areas identified as Noise Zone I, beyond the Zone II noise contours to the south of PTA. The document references Noise Zone I and land areas outside PTA or "off-post" areas as being "compatible land uses" with noise and describes these areas as being barren or devoid of resources, which is inconsistent with the nearby presence of a National Park. Therefore, we request the modeling of noise contours for Zone I to demonstrate that noise will not carry to parklands and will not impact park resources including visitor experience, cultural resources including cultural landscapes, designated wilderness or threatened and endangered birds. Our own noise modeling in this type of lava terrain indicates that noise travel great distances.

Response 5 to Comment F-2:

As depicted in Figure 4.5-1, the Zone III noise contours do not leave the installation's boundaries. Zone I contours include all areas outside of the Zone II contour; there is no "end line" for Zone I noise contours. Zone I noise contours, or areas outside of the Zone II noise contours, are considered compatible with all types of land uses. Given the noise levels expected from the proposed IPBC, the Army does not project any significant noise impacts on the Park from Army training exercises at PTA given the distance of the site from the National Park.

Geographic Orientation and Maps

Overall we found the document maps to be very difficult to orient the reader geographically. Only one map in the document shows adjoining landowners and was not of an adequate scale and did not include roads or trails. Please increase the scope of the maps throughout the document to identify adjoining land ownership and land management agencies in your documents to better enable readers to understand the land uses that adjoin the project areas.

Response 6 to Comment F-2:

Figure 3.1-1 has been revised to identify adjoining land ownership from PTA.

Biological Resources

Hawai'i Volcanoes National Park is designated a National Park and World Heritage Site/Biosphere Reserve due to its volcanic, ecological and cultural significance. The impact area on Mauna Loa occurs in relative close proximity to known nesting habitat within the park of the federally endangered Hawaiian Petrel ('Ua'u) and proposed endangered (and presently state listed endangered) Band-rumped Storm Petrel ('Ake 'ake). Both species are nocturnal long distance flyers whose nesting activities and aerial displays occur within the park primarily from 8,000-10,000' elevation on Mauna Loa. However, an active display area and limited nesting attempts from 5,100-6,000 elevation on SW Mauna Loa, and recently documented calling birds in the Kohala Mountains at 3,000-3,200', suggest Hawaiian petrels also still use lower elevations where conditions permit. Based on proximity and similarities in substrate age and elevation between park habitat and the proposed Mauna Loa project area, and past historical documentation, there is potential for these birds to occur within the impact area. The noise, vibrations and visual intrusions generated by ground activities and low flying aircraft, particularly any night activities during the breeding season, and increased risk for wildfire could potentially alter bird behavior and result in negative impacts to birds. Site surveys and consultation with subject matter experts familiar with bird

use in the impact area are recommended to effectively evaluate potential impacts to birds by the proposed expansion and increase in use and mitigation measures identified as needed in consultation with USFWS. Increased use of unshielded lighting anywhere within PTA has the potential to alter the behavior of either of these nocturnal seabird species, including causing groundings of adults and newly-fledged chicks.

We have additional concerns about the potential impacts to the federally endangered Hawaiian goose (Nēnē) that is known to utilize several areas in the Saddle region including PTA and the neighboring Kipuka Ainahou Nene Sanctuary. The majority of birds found in the Saddle region actually originate from other populations across the island. Nene are known to move between multiple areas, including to and from Hawai'i Volcanoes National Park, and flight routes and stops around Mauna Loa and in and through the Saddle area are unknown and not necessarily consistent. Because endangered Nene do indeed utilize as well as traverse the project area, it is not possible to rule out the potential for impacts due to increased noise, vibrations and visual intrusions generated by ground activities, low flying aircraft or potential wildfire which could alter bird behavior on the ground and result in negative impacts to birds. Similar to other listed species, site surveys and consultations with subject experts familiar with bird use in the impact area are recommended to effectively evaluate potential impacts to birds by the proposed expansion and increase in use, and mitigation measures identified as needed in consultations with USFWS.

Response 7 to Comment F-2:

Please see response to comment F-1. PTA Natural Resources staff is conducting a six year petrel survey for the area and will complete ongoing studies of Hawaiian hoary bats and Hawaiian petrels in an attempt to describe each species' temporal and spatial patterns of occupancy at PTA. These surveys have been ongoing for 3.5 year with no evidence to date of any petrels occurring at PTA. The HAMET surveys conducted in May and August 2011 on Mauna Kea and Mauna Loa corroborate these findings. The USFWS 2013 BO issued to the Army for the IPBC project states, "Though approximately 48% in Action Area F has been identified as potential habitat, the presence of feral cats, feral dogs, mongoose, and rodents throughout PTA makes the likelihood of a Hawaiian petrel colony occurring within the area extremely unlikely." (Action Area F is the area surveyed for the IPBC preferred alternative). The 2013 BO also states, "In conclusion, surveys and accumulated data by PTA environmental personnel indicate there is no significant presence of habitat use by Hawaiian petrels within the action area. The Hawai'i County ordinance also limits the amount of ambient light that could attract Hawaiian petrels. Therefore, very few Hawaiian petrels are likely to encounter lights of the proposed IPBA project." The 2013 BO provides avoidance and minimization measures for Hawaiian hoary bats and Hawaiian petrels and states that with their implementation the IPBC project "may affect, but is not likely to adversely effect" these two species. The 2013 BO avoidance and minimization measures includes use of down-shielded, low-wattage lights and that lights only be used when night training is scheduled. The previous BO (2003) for PTA requires shielding of bright lights during training. A copy of the 2003 BO is available at the Internet Web site, <http://www.garrison.hawaii.army.mil/sustainability/Documents/NaturalResources/BO/PTA/2003PTAFinalBO.pdf>

Figure 3.9-3 on page 3-85 shows the occurrences of federally listed wildlife species observed. Depicting all occurrences is helpful, although it is somewhat confusing without any indication of time period these observations cover. However, it would be more informative to also assess and present the likely range of these species based on extrapolation from known habitat use to same/similar habitat in impact area and other locations in PTA that apparently have been poorly surveyed.

Response 8 to Comment F-2:

This is beyond the scope of this EIS and is more appropriate in a formal study or other biological ESA document. The suggested extrapolation would not be valid because of the special conditions at PTA. There are micro-climates at PTA which means that predictions cannot be made easily. In addition, there are special conditions in the PTA impact area. The same factor that makes it impossible to conduct

surveys also renders extrapolation invalid given the prevalence of explosives and other impacts. In addition, the effect of ungulates browsing in the PTA impact area is hard to measure and also precludes useful extrapolation.

The document indicates that surveys and consultation for listed plant species has not been completed yet (page 3-88). A level of impact cannot be accurately assessed if surveys have not been completed. Since mitigation measures are part of the impact level, the surveys and USFWS consultation needs to be completed prior to the final EIS to allow public/agency comment. We look forward to reviewing the Biological Opinion in relation to the EIS to determine potential impacts to our shared federally listed species. As mentioned previously, surveys should be completed on all the alternatives, not just the preferred alternative. Observations of some plant species require that surveys be conducted during specific time of the year. It is clear from the document if surveys were completed during the appropriate time to year to capture ephemeral plants.

Response 9 to Comment F-2:

*Please see Response 1 to Comment F-1 above. Surveys for federally listed plants have been completed for both of the proposed IPBC locations. Formal and informal consultation with the USFWS has also been completed. This consultation was very involved and detailed, and occurred only on the preferred alternative, in part because of the intense focus involved. There are no listed plant species in the preferred alternative area that would be expected if surveys had occurred at a different time of year. The October survey was adequate to identify the plants in the area. The 2013 BO provides conservation measures for five listed plant species: *Asplenium peruvianum* var. *insular*, *Kadua coriacea*, *Silene hawaiiensis*, *Spermolepis hawaiiensis*, and *Zanthoxylum hawaiiense*, which include propagation, outplanting, ex situ genetic storage, and site management. A copy of the 2013 BO is included in Appendix G of the Final EIS.*

All sites should be surveyed for federally listed plants and animals by the appropriate subject matter experts if an impact level and appropriate mitigations are to be assessed and developed. Section 3.9.4 discusses biological resources surrounding PTA, but does not include a map or any description of surrounding landowners.

Response 10 to Comment F-2:

The 2013 BO, included in Appendix G of the Final EIS, provides conservation measures for five listed plant species and one listed wildlife species, the Hawaiian goose. An updated land use map Figure 3.1-1 was developed with landowner information.

Federally listed invertebrates are mentioned in section 3.9.4, but not mentioned previously. It needs to be clear in the Affected Environment if these species are found on PTA and/or in the impact area, and if they are found, what impacts may be expected.

Response 11 to Comment F-2:

*There are no federally listed invertebrate species on PTA. There are at least 90 species of arthropods and six (6) other invertebrates found on PTA. A 1996 to 1998 survey found 485 taxa of arthropods on PTA. Most taxa were nonnative species. Other more recent invertebrate studies determined the presence and location of the Argentine ant (*Linepithema humile*) and other ant species (USAG-HI, 2010c).*

The statement found on page 4-57 – ‘it is assumed that listed species would have previously left the area’ should be confirmed through site surveys. Additionally, the analysis does not account for species’ original ranges and the need for range expansion as the species recovers.

Response 12 to Comment F-2:

Please see response to comment F-1. It is assumed and supported by the 2013 BO that animals, particularly bats and the nēnē will leave the area temporarily during construction or training activities.

Section 4.9 has been revised to reflect this temporary displacement due to the short-term noise. The 2013 BO includes information concerning observations of listed species at PTA. The Army has not had any "takes" of listed species since the BOs have been issued (starting in 2003). The range of the species as they recover would be speculative in nature.

Page 4-59 state that permanent loss of the resource may occur, yet it says the impact level is significant mitigable to less than significant. How will a permanent loss of the resource be mitigated adequately to make the impact less than significant?

Response 13 to Comment F-2:

Section 4.9.5.2 has been modified to clarify this issue and makes clear that plants have the capacity to regenerate after a wildland fire. Individual plants can also grow new leaves after damage from bullets and other training activities. The EIS also highlights mitigation measures, which are provided in Section 4.9. It points out that wildfire control measures are described in Section 4.15.

Water Resources

In the Water Resources section (Section 4.7), there is no discussion of the potential impacts of ground water well on water resources. Ground water is a water resource. It is discussed under Live-fire Training Impacts that contaminants will be kept from going off-site through implementation of BMPs, but BMPs are not included in the EIS. In addition, it is not discussed how the munitions will be kept from leaching into the soil, and eventually the ground water. This should be addressed more clearly and BMPs should be provided since they are an integral part of the impacts analysis. Alternatively, this could be addressed in 4.16 Sustainability, but is not currently. While there may not be a significant increase in water use, there is proposed to be a significant shift in the source of water for PTA, which would result in a significant increase in use of the ground water for that water table.

Response 14 to Comment F-2:

A separate Environmental Assessment (EA) was prepared by the University of Hawai'i per the State's NEPA requirements for drilling a test well; specific impacts were addressed within that document and provided for public review. A copy of the Final EA is available at the Internet web site: (http://gen.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Hawaii/2010s/2011-06-08-FEA-UH-Hilo-Water-Well.pdf). Information pertinent to the IPBC project has been incorporated into the Final EIS.

However, it does not change that the lack of surface or groundwater greatly reduces the probability of contaminant migration in both the Cantonment Area and General Range Area. The conclusions of an ORAP assessment of PTA conducted in 2010 (discussed in detail in Section 3.8) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the range areas and within the impact area at PTA. Additionally, the BMPs briefly discussed within the section are covered by the NPDES permit for site specific requirements and will be more fully analyzed in subsequent NEPA analysis as appropriate.

Cultural Resources

Comments for the Draft PTA Programmatic EIS Modernization of Training Infrastructure under Section 106 of the National Historic Preservation Act (NHPA) and NEPA included a review of the draft EIS document and knowledge of cultural resources distribution at PTA. Based on this review the following comments regarding cultural resources apply:

- 1) The National Park Service is responsible for implementing and maintaining the National Register of Historic Places. As such, eligibility determinations are of concern.
 - a. Inventory surveys are incomplete and data on archeological site significance is lacking.

- b. The document is also lacking detail on specific historic buildings that will be impacted. The number of buildings expected to be impacted is not included. Also, data on buildings previously preserved is not clear. On page 4-64 the document notes that four buildings have been preserved, but later says six buildings have been preserved.

Response 15 to Comment F-2:

a) Surveys identifying potential cultural resources within the Western Range Area (preferred alternative) are complete. Evaluation surveys for site significance were completed in February 2012. Consultation with the SHPD, Native Hawaiian Organizations, and interested parties was started in March 2011, and completion of the signed Programmatic Agreement is anticipated in February 2013. Site survey information is available upon request and has been incorporated into the EIS for the two alternative locations for the proposed IPBC. USAG-HI developed appropriate APEs for each IPBC alternative in order to fully assess effects to cultural resources as a result of the proposed undertaking. The APE for the IPBC has been modified to include both the Charlie's Circle alternative and the Western Range Area (preferred alternative) alternative, as well as the supporting infrastructure for both. There are not separate APEs for the two (2) alternatives and both locations are being considered together under the Section 106 consultation. The mitigation measures stipulated in the Programmatic Agreement have been summarized in Section 4.9 of the Final EIS. A copy of the Programmatic Agreement is available in Appendix D of the Final EIS.

b) None of the Quonset huts within the Cantonment Area at PTA have yet been determined eligible. The Army committed to preserve four (4) female billets in connection with the demolition that was required for the construction of the new Saddle Road. The EIS has been revised to reflect the preservation of the four (4) buildings.

- 2) The Saddle region contains numerous trail systems and served as a corridor for travelers moving across the islands as well as to the summits of Mauna Loa and Mauna Kea. The document fails to address how these links may be severed or impacted by the construction of the IPBA.

Response 16 to Comment F-2:

The proposed IPBC construction will not affect any currently used trails in the Saddle Region, nor has the archaeological survey identified any archaeological trails within the IPBA APE.

- 3) The document fails to address the impact that destruction of a segment of a lava tube may have on extended segments of the tube system, including subsurface alteration of the physical property, changes in air flow and humidity.

Response 17 to Comment F-2:

SHPD's general assessment is that if it seals off entry to the lava tube it probably affords better protection to any resources within. Most lava tubes at PTA do not only have one entry way, there are multiple ways that air can enter them. The lava tube may be truncated in one small section, but there are generally several other entrances and cracks that allow for the flow of air. Likewise, the lava itself truncated many of the lava tubes during formation, or they were subsequently truncated by natural collapse. As stated in the Final EIS and the Programmatic Agreement, for some lava tubes and archaeological features, action can be taken to avoid construction impacts including through range design. As one of the mitigation measures for cultural resources, the USAG-Pōhakuoa archaeologist would participate during the range design charrette(s) until the IPBC design is finalized to build avoidance measures into the design process.

- 4) The document fails to address potential Traditional Cultural Properties and Ethnographic landscapes on PTA itself, and potential impacts to these properties.

Response 18 to Comment F-2:

Two previous studies have not identified any Traditional Cultural Properties at PTA, or any Ethnographic landscapes. Only archaeological sites have been identified. Section 3.10 of the EIS has been revised to include this information.

- 5) The document fails to address potential Cultural Landscapes, including the historic military landscape (WWII – through Vietnam) and potential impacts to these landscapes.

Response 19 to Comment F-2:

PTA was constructed in 1956 and has remained essentially unchanged. None of the Quonset huts within the Cantonment Area at PTA have yet been determined eligible and the training ranges are still being used for their original intent.

- 6) The document should provide a map that shows an overlap of sensitive archeological site locations and proposed modernizations projects.

Response 20 to Comment F-2:

The Final EIS includes the results of the surveys for the proposed Western Range Area and Charlie's Circle. Figure 3.10-2 of the Final EIS depicts the Archaeological Sensitivity Areas at PTA. Per the mitigation measures in the Programmatic Agreement, the USAG-Pōhakuloa archaeologist would participate during the range design charrette(s) until the IPBC design is finalized to build avoidance measures into the design process.

The document should provide a map that shows locations of previously surveyed areas by project, as well as intensity of survey (reconnaissance versus inventory level survey).

Response 21 to Comment F-2:

Previous surveys are described in Section 3.10.3 Historic Overview - PTA and Section 3.10.4 PTA Range Area. These survey maps can be reviewed in the identified reference documents within the EIS.

General

From the description of the proposed action on page ES-2, paragraph 2, it appears that the impacts have been analyzed only for the training activities conducted by the Army. Where and/or when will the training needs of the other branches of the service be met at PTA? How might this affect the impact levels described in the document (e.g. for live fire training, aerial gunnery, etc.)?

Response 22 to Comment F-2:

The Final EIS reviews cumulative impacts from other Military Services at PTA in Chapter 5, Cumulative Impacts.

Many of the modernizations facilities described in Appendix A refer to needing further (tiered) NEPA and NHPA compliance. All of these items taken together will substantially increase the level of impacts to affected resources and it doesn't appear this is addressed adequately in the cumulative impacts discussion.

Response 23 to Comment F-2:

The Draft 2011 PEIS has been revised from a programmatic PEIS to a project-specific EIS for the proposed IPBC. As this comment points out, additional NEPA analysis will occur, and this will reveal more specific information about potential impacts from future modernization projects as they become more mature and ready for the decision-making process.

It is not clear from the document what other agencies were contacted regarding the proposed action. The National Oceanic and Atmospheric Administration (NOAA) operates an observatory on Mauna Loa

between the park and PTA. There may be impacts related to dust or other air pollutants that could impact the equipment or data collected. It is recommended that they be consulted with, if they are not currently on your list.

Response 24 to Comment F-2:

NOAA reviewed the EIS and provided comments. Additional air quality revisions were made in the Final EIS per comments made by the EPA, Comment No. F-4.

Although your project does not propose flights above the park, please note Kīlauea Volcano continues to experience an ongoing summit eruption at Halema'uma'u Crater. The FAA has issued a Temporary Flight Restriction, (TFR) for aircraft safety for explosive eruptions and presence of ejected volcanic particulates at Kilauea summit (NOTAM: Hilo Vortac (ITO) 209 degree radial at 24.6 miles (Latitude 19°24'20"N, Longitude 155° 17'26"W for a current radius of 3 nautical miles). This is from the surface up to and including 4000' agl. Eruptive activities are continuing to produce a hazardous ash cloud which may cause aircraft engine damage/failure and abrasion damage due to airframe and windshield surfaces. Plume size fluctuates. Explosive events with large amounts of ash can appear with no warning.

Response 25 to Comment F-2:

Thank you for your comment. Military planners will take this phenomenon into account.

Visitors come to their national parks to experience the natural quiet and solitude. Park managers are charged with protecting critically endangered species, designated wilderness and park soundscapes as well as limiting activities that cause unnecessary noise or threaten the natural quiet. Both agencies are jointly engaged in protecting our country and its resources. We anticipate working with you to build a cooperative relationship and resolve our concerns as the planning progresses.

Response 26 to Comment F-2:

The Military Services look forward to future coordination with the National Park Service for upcoming training activities occurring at PTA.

Comment F-3: Christopher P. Haynes, Maj, MS – Chief, Environmental Health, Department of the Army, Tripler Army Medical Center, Department of Preventive Medicine

4. A certified entomologist must closely monitor any applications of pesticides in any areas inhabited by the Hawaiian hoary Bats. The use of pesticides could eliminate their food supply or poison the bats directly.

Response 1 to Comment F-3:

All staff that handle and apply pesticides at PTA are certified by the State Department of Agriculture. All of the staff qualifies under PBE requirements for the State Department of Agriculture and CEMML. All areas of the installation are expected to harbor bats, but pesticides are applied to invasive species and not applied generally. The bat food supply is flying insects; pesticide applications for insects are limited to ants.

1. Any full time employees working in/around the live-fire shoot house or involved with maintenance of any impact brims should be enrolled into an occupational health surveillance and/or hearing conservation program.

Response 2 to Comment F-3:

MSE-HI will ensure SOPs are in place for the health and safety of range employees.

2. A health hazard assessment should be conducted on the live-fire shoot house to ensure that the health risks are mitigated before the construction plans are finalized.

Response 3 to Comment F-3:

Thank you for your comment. Your comments have been forwarded to the USACE for further consideration/incorporation.

3. Industrial hygiene should conduct a ventilations survey, at least semiannually, on the live-fire shoot house to ensure that the ventilation system is operating correctly.

Response 4 to Comment F-3:

The Shoothouse is no longer a part of the project description in the Final EIS.

4. All portable latrines must have hand-washing stations in the immediate vicinity with proper drainage. There are no plans to have potable running water or sewage systems in the IPBA; therefore, hand-washing stations must be included in the contracting of any portable latrines.

Response 5 to Comment F-3:

MSE-HI will ensure that units are briefed on sanitation responsibility and that hand washing capabilities are available.

5. The current construction plan indicated that all six portal latrines will be co-located in one area. Highly recommend that these portable latrines be evenly disbursed over the 200-acre training area.

Response 6 to Comment F-3:

Thank you for your comment. Your comments have been forwarded to the USACE for further consideration/incorporation. Site selection is based on standard range design.

6. To assist in preventing any food borne illnesses, hand-washing stations should be located near the covered mess area and all portable latrines must be at least 100 meters away. Furthermore, all food serving and eating areas must be constructed using nonporous materials. Porous material, such as wood, retains bacteria and cannot be properly cleaned.

Response 7 to Comment F-3:

Thank you for your comment. Your comments have been forwarded to the USACE for further consideration/incorporation. The covered mess follows approved standard range design. Field food service will be in accordance with Army Regulations (DA PAM 30-22).

Comment F-4: Kathleen Martyn Goforth, Manager, U.S. Environmental Protection Agency, Region IX, Environmental Review Office Communities and Ecosystems Division

The U.S. Environmental Protection Agency (EPA) is providing comments on the Draft Programmatic Environmental Impact Statement for the Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area at Pohakuloa Training Area (DPEIS). Our comments are provided pursuant to the National Environmental Policy Act (NEPA), council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA supports the project purpose – modernizing the Pohakuloa Training Area (PTA), to reduce the shortfall in live-fire training areas. In particular, we support the Army’s project to install a packaged sewer treatment system at PTA. We have rated the DPEIS as *Environmental Concerns – Insufficient Information (EC-2)* (please see the enclosed “Summary of EPA Rating Definitions”). We are concerned about the emissions of particulate matter from the specific project proposal – construction and operation of the Infantry Platoon Battle Area or IPBA. We have suggested mitigation measures to reduce the air quality impacts. We seek clarification of the regulatory status of the facility’s stormwater. We are also concerned the DPESI did not include a Biological Assessment for the IPBA,

but we do look forward to reviewing it and a summary of the expected Biological Opinion from the U.S. Fish and Wildlife Service, when it is incorporated into the final PEIS. For more information about these concerns and recommendations, as well as our comments on Training Intensity, Sustainability and Noise please see our detailed comments.

We appreciate the opportunity to review this DPEIS. When the Final PEIS is released for public review, please send one hard copy and one electronic copy to the address above.

Air Quality

Particulate Matter

The DPEIS mentions that the entire state of Hawai'i is in attainment or unclassified for each of the National Ambient Air Quality Standards (p. 3-20). The DPEIS also notes that Clean Air Act General Conformity de minimis thresholds do not apply, but the thresholds are used as a basis of significance. For particulate matter emissions less than 10 microns (PM10), the de minimis level is 100 tons per year. Table 4.4-2 lists PM10 emissions from the construction of the IPBA at 565.7 tons per year, which seems high for the project described. Further the DPEIS does not clarify if this estimate is mitigated or unmitigated emissions. The accompanying discussion states that emissions are significant but mitigable to less than significant (p. 4-19). The DPEIS also states that "Construction contractors would be required to comply with the provisions of Hawai'i Administrative Rules, Sec. 11-60, 1-33 on Fugitive Dust as part of the requirements of their construction contracts." (p. 4-18). Hawai'i's regulations cover emissions of visible dust, and require reasonable precautions.

Response 1 to Comment F-4:

Section 4.4.3 and Appendix E of the Final EIS has been updated to reflect the recalculated emissions and impact methodology to address concerns related to particulate matter. The Draft EIS analysis was based on several general assumptions about how the proposed IPBC construction activities would occur. The USACE provided better guidance on the construction activities which were applied to recalculate PM10 emissions.

Note the PM10 and PM 2.5 emissions in the Draft EIS were calculated for years 1 and 2 using an EPA emission factor for fugitive dust from heavy construction operations. The emission estimates assumed no controls were used (unmitigated). Additionally, the Final EIS addresses that these emissions are unmitigated and identifies mitigation measures to be undertaken as part of the construction activities.

Particulate matter less than 2.5 microns (PM2.5) emissions for the project are 56.6 tons, but emissions are not specified by year for the 730 day project (270 construction days per year). The Draft PEIS does not pose a significance level for PM2.5 emissions. PM2.5 emissions are primarily from combustion activities, such as diesel construction equipment. While the DPEIS proposes mitigation measures for fugitive dust, no mitigation is proposed for PM2.5 emissions.

Response 2 to Comment F-4:

The emission estimates using the EPA emission factor are based on the total area disturbed and the number of construction days. A total of 110 disturbed acres and 240 days/year were assumed for years 1 and 2; PM2.5 emissions are the same for both years. Potential impacts on air quality from construction activities have been revised in Section 4.4.3 and Appendix E to provide additional details on emissions control, including PM2.5 emissions. Construction of the IPBC is estimated to take three (3) years or a total of 720 calendar days (240 days/year). The Army will undertake mitigation such as applying water or a dust palliative since the emissions were estimated for fugitive dust from construction activities.

EPA is concerned that particulate matter emissions (both PM10 and PM2.5) may pose a threat to human health for soldiers and contractors stationed at the Pohakuloa Training Area.

The DPEIS includes information on Total Suspended Particles (p.19), but does not provide a threshold for significance or discuss its impacts.

Response 3 to Comment F-4:

Section 4.4, Air Quality, has been changed to identify a threshold of significance for Total Suspended Particles and potential impacts. The Army used the general conformity de minimis emission level of 100 tons per year for PM2.5 and each precursor (SO2, NOx, VOC, ammonia). Below that level the Army assumes the impacts are not significant.

Recommendations:

The FPEIS should list emissions from IPBA construction with and without mitigation by year for the 3-year construction period.

Response 4 to Comment F-4:

The Final EIS has been updated to reflect construction activities during the estimated 480 calendar days of construction (240 construction days per year) with and without mitigation based on additional details on vehicles and vehicle operations during construction activities.

The FPEIS should analyze health effects of particulate matter exposure. We recommend dispersion modeling to demonstrate the annual mean and 24-hour PM10 and PM2.5 concentrations do not exceed EPA's NAAQS¹ for residential portions of the Cantonment (i.e. encampment) Area.

Response 5 to Comment F-4:

The Army does not typically conduct dispersion modeling as part of the analysis unless a general conformity determination is required. For this EIS, a general conformity is not required. However, Section 4.4 in the Final EIS has been updated to include health effects of particulate matter exposure based on the emissions calculations.

In light of the potential significance, we recommend the FPEIS provide considerable additional detail on emissions control, specifically including:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.

The Army agrees to following these controls to minimize sources of fugitive dust.

- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.

The Army will implement the use of water trucks for stabilization of surfaces under windy conditions. Due to the remote location of the IPBC site, the Army does not anticipate installing miles of dust fencing.

- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph. (BO 2013)

The Army agrees to adhering to these speed limits during the IPBC construction process.

Mobile and Stationary Source Controls:

¹ As stated in 71 FR 61165 (10/17/2006), the NAAQS PM2.5 and PM10 standards were "intended to provide protection for people residing in or near localized areas of elevated concentrations."

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal Standards².
- Use diesel fuel having a sulfur content of 15 parts per million or less, or other alternative diesel fuel, unless fuel cannot be reasonably procured in the market area.

The Army agrees with and will follow the measures suggested above to minimize emissions from mobile and stationary sources.

Administrative controls:

- Develop construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emissions controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)

The Army agrees with and will implement the above suggested administrative controls.

Response 6 to Comment F-4:

As identified in Section 4.4.3, potential impacts to air quality from construction activities will be managed through development of a Dust and Soils Mitigation Monitoring Plan and or use of best management practices (BMPs) during construction and operation of the proposed IPBC. The plan would address mitigation measures such as, but not limited to, restrictions on the timing or type of training during high-risk conditions, dust monitoring and control measures, vegetation and soil monitoring, use of periodic application of water or dust control palliative products, use of washed gravel on military vehicle trails, and buffer zones to minimize dust emissions.

The FPEIS should also discuss methods to ensure compliance with mitigation measures (e.g. contract specification and Army oversight).

Response 7 to Comment F-4:

The Army NEPA regulation requires that mitigation measures be funded. Essentially, mitigation measures that are adopted in the Record of Decision become part of the Proposed Action and are understood to be mitigation measures that will be funded and implemented. All parts of the Proposed

² EPA's website for non-road mobile sources is <http://www.epa.gov/nonroad/>

Action must be funded in order for the action as a whole to proceed. The Army also requires a monitoring plan for mitigation to verify the mitigation is working as planned. The Army has revised Section 4.4, Air Quality, to note that requirements in the contract procurement would require compliance with mitigation measures and to minimize PM emissions.

Greenhouse Gas Emissions

The DPEIS compares annual Greenhouse Gas (GHG) emissions for the project, IPBA maneuver training emissions, to 2009 total U.S. GHS emissions of 6,600 million metric tons per year (p.4-22). CEQ in its Draft Guidance³ suggested 25,000 tons per year as a measure of significance. While the emissions are still small relative to the CEQ significance level, the GHG emissions at Range 20 are nearly half of the other alternatives at the Western Range and Charlie's Circle.

Recommendations:

The FEIS should use an alternative significance level for GHG emissions.

The Army should encourage carpooling or create a base shuttle system to minimize emissions.

Response 8 to Comment F-4:

The Southwest of Range 20 alternative has been eliminated as an alternative for consideration in the Final EIS.

The Army currently encourages carpooling and shuttles for civilians working at PTA to minimize emissions. Soldiers training at PTA would convoy to PTA reducing the number of vehicles on the road and traveling to the installation.

Water Resources

The DPEIS notes the unusual hydrology of the Pohakuloa Training Area (PTA). Stormwater leaves the site by sheet flow, instead of storm sewers, rivers, or streams. PTA has a high rate of surface water infiltration (p.3-50). Additionally, there are “no surface streams, lakes or other bodies of water within the boundaries of the PTA; and “There are no perennial streams within 15 miles of the PTA” (p.3-49).

In a discussion of stormwater requirements (p.3-50 and 51), the DPEIS states “Currently, an independent review of PTA is being conducted to verify the installation’s stormwater exemption for storm water associated with Modernization of PTA and Construction and Operation of an IPBA industrial activity.” EPA is not aware of an exemption from stormwater permitting requirements. An exclusion from permitting exists where no exposure occurs⁴. Additionally, EPA guidance clarifies that no permit is required where no runoff naturally occurs from a facility. Even if one of these examples applies to the PTA, the DPEIS does not adequately characterized storm water regulation at the facility.

Response 9 to Comment F-4:

Section 3.7 has been revised to more accurately reflect the stormwater activities at PTA. While USAG-HI does have a Stormwater Management Plan, it does not incorporate PTA. A Stormwater Management Plan for PTA is being drafted.

The DEIS also notes that “PTA has a Stormwater Management Plan in place” (3-50), but does not explain the elements of the management plan (e.g., industrial operations, construction, or range

³ Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, February 18, 2010.

⁴ See Stormwater Phase II Final Rule, Conditional No Exposure Exclusion for Industrial Activity, EPA 8330F000-015 January 2000 (revised December 2005) Fact Sheet 4.0 <http://www.epa.gov/npdes/pubs/fact4-0.pdf>.

operations). The DEIS discusses compliance with Section 438 of the Energy Independence and Security Act or EISA (4-39). This section requires federal facility construction projects larger than 5,000 square feet to maintain pre-development hydrology and prevent net increase in storm water runoff; however, the DPEIS does not explain how compliance will be accomplished for the Infantry Platoon Battle Area. The DPEIS does clarify that a storm water permit is required for construction in the PTA Cantonment Area, which is physically separate from the PTA Range Area.

Recommendations:

The FPEIS should summarize the PTA Stormwater Management Plan and clarify whether PTA discharges regulated storm water.

The FPEIS should summarize mitigation measures necessary to comply with Section 438 of EISA. We encourage the Army to consult the Unified Facilities Criteria⁵

Response 10 to Comment F-4:

The EIS mis-states that PTA has a Stormwater Management Plan in place; the USAG-HI does have a Stormwater Management Plan; however, PTA is not part of the USAG-HI Stormwater Management Plan. Development of a Stormwater Management Plan for PTA is being undertaken. Construction activities will require a NPDES permit.

Due to the topography at PTA, the Army does not anticipate any runoff will leave the site. To comply with EISA, the proposed IPBC Range will include design elements to maintain the pre-development hydrology. The design package for the IPBC will include measures to keep water runoff onsite. No runoff is expected to leave the site because of the porous nature of the site. No surface water is present near the IPBC. The building design will follow the Unified Facilities Criteria.

Threatened and Endangered Species

We note that the DPEIS does not include a Biological Assessment for the IBPA but does include a placeholder for it (Appendix G). Additionally, Section 4.9 of the DPEIS notes that Section 7 consultation with the U.S. Fish and Wildlife Service is required for the project specific element of the DPEIS, the Modernization/Construction of the IPBA.

Recommendation:

The FPEIS should be including the Army's Biological Assessment and a summary of the Biological Opinion resulting from the Section 7 consultation. The FPEIS should commit to all specific project elements or mitigation measures required pursuant to the Section 7 consultation.

Response 11 to Comment F-4:

The 2013 Biological Opinion is included in Appendix G. The Army will carry out the commitments required by the 2013 Biological Opinion and has revised the Final EIS accordingly.

Training Intensity

The DEIS notes that a majority of comments received during scoping were in opposition to a perceived expansion of PTA (p.1-37). It further states "This Programmatic EIS does not propose expanding operations geographically, or increasing live-fire or maneuver training beyond what was analyzed in the Final EIS for the Permanent Stationing of the SBCT [Stryker Brigade Combat Team] (U.S. Army and USACE, 2008a) or beyond historical training levels (pre-2001).." We encourage the Army to be responsive in addressing this concern, and we understand how changing operations levels

⁵ Unified Facilities Criteria, Revision Summary Sheet, Document: UFC 3-210-10, Low Impact Development
http://www.garrison.hawaii.army.mil/sustainability/Documents/Clean_Water/UFC3_210_10.pdf

can be confusing for the public. For example, if the Permanent Stationing of the SBCT (effective with the signing of the record of decision in April 2008) increased training operations and current training operations are down from year 2000 levels due to overseas deployments (p. 1-27), then the public has yet to see the full effect of increased training from the last FEIS.

At multiple locations, the DPEIS discusses ammunition authorization and provides tables of annual expenditures (e.g. Table 2.1-5 and appendix D). However, the DPEIS does not provide any historical context for the information provided, such as the actual quantities of ammunition expended.

Recommendation:

Given the concern over increased training, EPA suggests the FPEIS (both programmatic and project-specific elements) include metrics that demonstrate annual training intensity before and after implementation of projects, including ammunition expended.

Response 12 to Comment F-4:

The PEIS has been revised to a project-specific EIS; the programmatic portion has been deleted. Chapter 2 provides tables of the ammunition expended at the IPBC. Tables 2.1-2 and 2.1-3 identify the estimated annual expenditure of munitions on the IPBC, by weapon system, by unit echelon (platoon through brigade). Table 2.1-4 identifies the estimated annual expenditure for CAB units at the IPBC. Table 2.1-5 identifies the estimated annual expenditure of other munitions used on the IPBC. Ammunition requirements are set forth in Standards in Weapons Training, Dept. of the Army Pamphlet 350-38. Training iterations to PTA will be based on training strategy, evolving doctrine, and operational needs. Text has been added to Chapter 1 of the Final EIS to define the historical use of PTA.

Sustainability

The DPEIS states that implementing modernization projects would help PTA comply with sustainable energy and building requirements, and we understand that PTA must comply with the Principles for Federal Leadership in High Performance and Sustainable Buildings. The planned barracks, for example, must be designed to achieve zero-net-energy by 2030, in compliance with Executive Order 13514. The DPEIS mentions that a Department of Energy (DOE) assessment found that PTA has the potential to reduce energy use by 22%, propane use by 24%, and water use by 33%. One modernization project would allow for solar hot water heating and installation of solar panels, which would contribute to meeting the PTA goal to increase renewable energy use by 25% by 2025 (p. 4-97 and 98).

We note that the focus of the DOE assessment is unclear. Did it provide recommendations for future buildings or current facilities? Additionally, the renewable energy goal, and the opportunity presented by modernization of PTA, is difficult to understand without knowing the quantity of renewable energy currently generated.

Response 13 to Comment F-4:

The Army has expanded Section 3.16, Sustainability, to better explain the purpose of the National Renewable Energy Laboratory (NREL) report assessing opportunities for renewable energy and energy efficiency at PTA and the resulting energy recommendations. Numerous recommendations were identified in the NREL report to reduce energy usage with several being base-wide and others applying to one or two buildings. Recommendations included retro-commissions of all mechanical systems, specialized controls, hybrid evaporative cooling roof-top units, solar collectors and water heaters, occupancy sensors, and photovoltaic.

The Army has revised the Section 3.16.3.1 of the EIS to clarify that renewable energy is not currently generated at PTA and there are no immediate plans for installation of renewable energy projects at PTA.

Per Executive Order 13514, all new federal buildings, entering the design phase in 2020 or later, are designed to achieve zero net energy by 2030.

PTA is a remote facility. Potable water is currently trucked to the site from 40 miles away (p.3-55). Electrical upgrades to remote areas of PTA will need miles of power lines. Sustainable design offers the Army an opportunity not only to reduce energy and water use, but reduce construction and operating costs. Water conserving fixtures, such as those recommended by EPA's Watersense Program (<http://www.epa.gov/watersense>) reduce water use and reduce costs associated with trucking water to the PTA, purchasing the packaged sewer system planned for the Cantonment Area, and pumping groundwater from the planned water well. Renewable energy generation can also reduce costs to run power lines to remote locations. One example of a location where renewable energy generation has been implemented by National Park Service to operate remote facilities is the use of photovoltaic arrays and battery storage, with backup generators, to operate Channel Islands National Park.

Recommendation:

The FPEIS should expand the discussion of sustainability, and clarify the purpose of the DOE assessment. If applicable to new facilities, the FPEIS should commit to meeting the energy and water conservation goals of the assessment through the modernization projects.

Response 14 to Comment F-4:

The Army has expanded Section 3.16, Sustainability, to better explain the purpose of the National Renewable Energy Laboratory (NREL) report assessing opportunities for renewable energy and energy efficiency at PTA and the resulting energy recommendations.

The FPEIS should state the quantity of renewable energy currently generated and summarize the facilities that collect it (e.g. number of wind turbines, size of photovoltaic panels). Where appropriate, the FPEIS should integrate renewable energy generation into modernization projects tiered to it.

Response 15 to Comment F-4:

There is no renewable energy currently generated at PTA and there are no immediate plans for the installation of renewable energy projects at the installation. The NREL report identified several recommendations for renewable energy generation at PTA that would be taken into consideration for future modernization projects.

Future tiered NEPA analysis should maximize sustainable design features to reduce construction and operating costs.

Response 16 to Comment F-4:

The Army will consider sustainable design features for future infrastructure projects in accordance with future tiered NEPA analysis.

Noise

The DPEIS frequently mentions that the PTA is surrounded by forested reserve and open land. The DPEIS refers to Figures, 3.5-2, 3.5-3, 4.5-1 and 4.5-2 that show that PTA is surrounded by forested land and open area (p. 3-40 and 4-29); however, only Figure 3.5-3 shows nearby land use, and it shows primarily the eastern perimeter of the PTA. Two small areas identified in the west are noted as "open." Figure 3.1-1, Land Ownership Map of PTA and Surrounding Areas, identifies this open land as owned by Bishop Estates and the State of Hawaii. To thoroughly describe noise impacts, the DPEIS should provide neighboring land use, and the location of the nearest permanent residents. The area near the project-specific preferred alternative IPBA warrants particular attention.

Recommendation:

The FPEIS should include a map showing land use around the entire PTA, and provide additional discussion on the location of the closest residents.

Response 17 to Comment F-4:

The Army has revised Figure 3.1-1 showing land use at PTA and content within Section 3.1.5 to address the location of PTA's neighbors. Figure 3.1-1 shows that adjacent lands are owned by the state and several estates and ranches. The Army has revised Section 3.1.5, Land Use Surrounding PTA, to better describe the neighboring land uses. The nearest residences to PTA are Waikii Ranch, a private residential development on 10-40 acre lots. The entrance to Waikii Ranch is located at Saddle Road mile 48, 14 miles west of the PTA main gate.

Editorial Comments

While the document is titled as a DPEIS, it contains both programmatic and project-level analysis. Although the document title does refer to a specific facility at the Pohakuloa Training Area – the IBPA, including the facility by name does not imply that the document contains project-level analysis. The document's summary abstract also does not mention that the DPEIS contains project-level as well as programmatic and site-specific, or project-level, analysis, EPA is concerned that some interested parties may not have known that the document includes project-level analysis and may assume that further NEPA analysis (Environmental Assessment or EIS) will occur prior to project implementation. We suggest that Army clearly title documents as both programmatic and project level analysis when appropriate.

Response 18 to Comment F-4:

The PEIS has been revised to a project-specific EIS addressing the construction and operation of the IPBC; the programmatic portion has been deleted.

The DPEIS appears to misstate available standard ranges (i.e. ranges acceptable for current training). It states, "Table 1.5-1 demonstrates that Range 8C Live-fire Shoothouse, the CLF, and the BAX (once it is operational) are the only standard collective ranges at PTA." (p. 1-25); however, several other training areas at PTA are listed as standard (e.g. Grenade Launcher Range, Mortar Range, and Pistol Range). We suggest the FPEIS make the statement about standard collective ranges at PTA consistent with Table 1.5-1.

Response 19 to Comment F-4:

This table has been deleted from the Final EIS. In the Draft 2011 PEIS, Table 1.5-1 includes both collective (unit training) ranges and individual ranges (such as Soldier marksmanship). For instance, the pistol range is for individual shooting and is not, therefore, "collective". The Army believes that Table 1.5-1 is correct when this is taken into account.

Figures 1.3-2 and 2.2-1 contain numbered areas that were not clarified by the legend or discussion of the figures. EPA recommends that the Army correct the legend and corresponding figure descriptions so that it is clear what is depicted by the figures.

Response 20 to Comment F-4:

Figure 1.3-2 has been revised to clarify the numbered areas as Training Areas.

3.2 STATE AGENCIES

Comment S-1: Calvin K.Y. Say, Speaker, House of Representatives, State of Hawaii

Thank you for the opportunity to comment on the Draft Programmatic Environmental Impact Statement for the Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area.

I am generally supportive of the proposed modernization, although I have not read the Draft EIS in detail. I believe that the modernization is necessary for the proper training of the 25th Infantry Division and other units that will use Pohakuloa Training Area.

I am confident that the U.S. Army will respect the citizens and environment of the Big Island and mitigate to the extent possible the adverse effects of the modernization and its individual projects.

Response 1 to Comment S-1:

Thank you for your comments.

Comment S-2: Stephanie Nagtata, Interim Director, Office of Mauna Kea Management, University of Hawai'i at Hilo

Thank you for the opportunity to comment on the Draft Programmatic Environmental Impact Statement for the Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area at Pōhākuloa Training Area, Hawai'i (DPEIS).

Supplemental EIS

It is the understanding of the OMKM that the DPEIS provides a general overview of the scope and potential impacts of the total project as currently envisioned by the Army. It is also the understanding that due to the relatively large scope of the proposed project the Army will prepare supplemental EISs as it moves forward with the implementation of the various aspects of the project. The OMKM would like to see the supplemental EISs contain more details about: 1) the phased portion of the project; 2) the identification and location (including clear, legible, and detailed maps) of the cultural and natural resources; 3) the assessment of the impacts; and 4) appropriate mitigation measures.

Response 1 to Comment S-2:

Future EAs and EISs would include the details addressed. The Army will include the OMKM for future document reviews.

Invasive Species

Of concern to OMKM are the introduction and potential impacts from the introduction of invasive species. OMKM is encouraged that the Army developed several plans to help reduce the impacts on biological resources. These plans include the Pohakuloa Implementation Plan (PIP) (developed in cooperation with the U.S. Fish and Wildlife Service and other agencies), and Integrated natural Resource Management Plan (INRMP) and an Integrated Wildlife Fire Management Plan (IWFMP). The plans were not described in detail, but OMKM would like to see that the plan(s) contains measures not only to control and manage invasive species, but measures to prevent the introduction as well as response actions in the event of an introduction of an invasive species.

Response 2 to Comment S-2:

The Final EIS includes an extensive discussion of invasive species in Section 3.9.2. This includes a description of the weed control program, use of wash racks, and other invasive plant control measures.

Potential Light Pollution

A discussion and an assessment of the impacts of lighting on the operations of observatories conducting astronomical research on the summit of Mauna Kea were not addressed in the DPEIS. The modernization, in particular the Cantonment Area, including the Bradshaw Army Airfield, could have a significant adverse impact on the operations of the observatories. OMKM concurs with the comments and mitigation measure submitted by the University of Hawai'i's Institute for Astronomy.

Response 3 to Comment S-2:

The PEIS has been revised to a project-specific EIS for the construction and operation of the IPBC; the programmatic portion has been deleted. The 2003 Biological Opinion, available at the Internet Web site <http://www.garrison.hawaii.army.mil/sustainability/Documents/NaturalResources/BO/PTA/2003PTAFinalBO.pdf> requires that artificial lights be shielded when in use at the installation. The 2013 BO also provides mitigation measures for lighting at the IPBC; a copy is included in Appendix G of the Final EIS. The Army is obligated under federal policy to follow energy-saving techniques and measures, which are discussed in Section 3.16 Sustainability. Both of these considerations will be taken into account when designing the IPBC and should address your concerns related to unnecessary artificial light.

The Army has expanded Section 3.16 to better explain the purpose of the National Renewable Energy Laboratory (NREL) report assessing opportunities for renewable energy and energy efficiency at PTA and the resulting energy recommendations.

Addition to the Abbreviation List

Please add KMA to the abbreviation list.

Response 4 to Comment S-2:

KMA was added to Acronym list.

Comment S-3: Robert A. McLaren, Associate Director, Office of the Institute for Astronomy, University of Hawai'i | MĀNOA

We have examined the subject Draft Programmatic Environmental Impact Statement and submit the following comments. Briefly stated, we are concerned that the proposed actions, if not implemented with the necessary mitigation, will have a significant adverse impact on the operations of the Mauna Kea Observatories. The specific impacts of concern are: sky glow (light pollution) and radio frequency interference.

Mauna Kea is home to the world's largest collection of astronomical observatories. It currently has thirteen telescope facilities, including four 8-10 meter diameter optical/infrared telescopes. Construction of the Thirty Meter Telescope, which will be by far the world's largest such telescope, is expected to begin in 2014. A dark night sky is absolutely essential for astronomical research. Artificial light sources produce sky glow (through scattering of light by air molecules and by dust), making the sky brighter, and making it difficult or impossible for astronomers to observe faint sources.

A recent study of the night sky over the Mauna Kea Observatories by the US National Park Night Sky Team showed that Mauna Kea's night sky remains one of the darkest in the world. The night sky has been protected for many years by a strong county lighting ordinance that restricts outdoor lighting on the island of Hawaii.

Parts of the Pohakuloa Training Area (PTA) are located within 6 miles of the summit of Mauna Kea, where the telescopes are located. Because of the close proximity, one artificial light at PTA is equivalent to over 40 artificial lights of the same type at more distant Hilo.

The PEIS does not address the use of artificial light at night or the resulting adverse impact of sky glow. We fear that, without the proper mitigation, this impact may be very serious. Therefore, we request that the Final Programmatic EIS include the following required mitigation:

- 1) Immediate and ongoing consultation between the Army and the university of Hawai'i Institute for Astronomy (UH IfA) regarding the use of artificial light at PTA.

Response 1 to Comment S-3:

The PTA PAO has reached out to the Hawai'i Institute for Astronomy to discuss the request to discuss the recommended mitigation and other efforts the Army is undertaking to address light pollution.

- 2) Any new or replacement artificial outdoor lighting will be fully compliant with the Hawai'i County Lighting Ordinance (Hawai'i County Code Sections 14-50 to 14-55). Such lighting will be kept to the minimum required to meet programmatic needs.
- 3) The impact of new artificial lighting will be offset by removing or retrofitting existing artificial light sources to bring them into compliance with the Hawai'i County Lighting Ordinance.
- 4) For all new or replacement lighting, use of only the minimum light necessary.
- 5) For all new and replacement lighting, complete elimination of any light emitted directly upwards – i.e., fully shielded lighting.
- 6) For all new or replacement lighting, careful spectral control to include elimination of blue light and strong limitations on the amount of green light.
- 7) Use of timer switches and motion sensors to avoid unnecessary artificial light.

Response 2 to Comment S-3:

The 2003 Biological Opinion requires that artificial lights be shielded when in use at the installation. The Army is obligated under federal policy to follow energy-saving techniques and measures. Both of these considerations will be taken into account when designing the IPBC and should address your concerns related to unnecessary artificial light. All upgrades to existing artificial light sources and future light sources will be in accordance with the latest federal energy-savings requirements and shielded in accordance with the 2003 and 2013 Biological Opinions.

- 8) Adoption by the Army of a program to remove or retrofit, over a period of several years, all existing artificial light sources to bring them into compliance with Hawai'i County Lighting Ordinance.

The Mauna Kea Observatories has four radio telescope facilities. They are very sensitive to radio frequency interference (RFI). Radar systems, in particular, can be a source of such interference. The PEIS does not address the use of radars and other radio transmitters, or the potential for RFI.

Response 3 to Comment S-3:

This subject can be raised during the formal dialogue proposed above.

We are requesting that the Final EIS include whatever information is currently available about the use of radar and radio transmitters and that it acknowledge the potential for interference with the radio telescopes on Mauna Kea. By way of mitigation, we request:

- 1) Immediate and ongoing consultation between the Army and the UHIfA regarding potential RFI and steps to mitigate it.
- 2) Commitment by the Army of its best efforts to avoid any adverse impact on the Mauna Kea Observatories resulting from RFI.

Response 4 to Comment S-3:

This subject can be raised during the formal dialogue proposed above. The dimensions of this problem can be discussed with ways to minimize interference defined.

3.3 LOCAL AGENCIES

Comment L-1: Jim Tollefson, President & CEO, The Chamber of Commerce of Hawaii, 1132 Bishop Street, Suite 402, Honolulu, HI 96813

We have reviewed the Draft Programmatic Environmental Impact Statement for the Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area at Pōhakuloa Training Area on Hawai'i Island, and support the purpose and scope of the planned actions.

The chamber is well aware of the security threats in the Asia Pacific region and the need to forward base a visible and combat ready US military force to deter armed conflicts and, should the need arise, to quickly and decisively defeat the enemy. The planned modernization of PTA is crucial to meeting that challenge by providing the means by which the military is able to train and maintain its forces in combat ready status for immediate deployment.

The proposed actions should provide the infrastructure and facilities that are essential to constructing a diversified environment suitable for full scale combined arm live-fire training. We are pleased that the proposed project envisions consolidating the live fire training needs of all the US armed services in Hawaii.

We would encourage the Army to review past EIS studies where local opposition was registered in not including an alternative calling for the use of available Army bases outside of Hawaii. It may be that similar opposition could be registered in the processing of this study.

We are also pleased that the proposed project doesn't involve the purchase of additional lands nor increase training over historical levels at PTA.

We remain hopeful that the completion of your studies and consulting with the interested parties will mitigate the identified significant impacts relating to environmental, biological and cultural resources.

Response 1 to L-1:

Thank you for your comments.

3.4 ORGANIZATIONS

Comment O-1: Jojo Tanimoto, Kailapa Community Association, P O Box 44512, Kamuela HI 96743

Proposed Military build up for Hawai'i Island EIS community input

The EIS needs to address the following:

1) Traffic and updated road infrastructure for Kawaihae Road---in Kawaihae. The current infrastructure does include sidewalks, crosswalks, street lights and etc. which would be needed for safety and to improve the infrastructure for the areas that would be most impacted by a military build up as proposed

The EIS refers to Waimea vs. Kawaihae

Response 1 to Comment O-1:

The Army hopes the maps within the EIS avoid any confusion. Thank you for your comment.

2) Water is at a premium. A military buildup would further tax the water supply. The current infrastructure would not support additional usage. If the Dept. of water supply cannot even supply the

Native Hawaiian communities across Honokoa Bridge with water, how can they support a buildup of the military? If they plan to develop water at Pohakuloa and transport it to Kawaihae, water needs to be provided to the Native Hawaiian community across Honokoa gulch.

Response 2 to Comment O-1:

The Final EIS is a project-specific EIS for the construction and operation of an IPBC. The Army does not anticipate that water efficiency measures contemplated will increase water consumption at PTA. Also, the Army does not propose to supply water to Kawaihae from PTA.

3) The ships currently cross in front of neighboring communities. This is an intrusion with excessive noise and unwanted visual disturbance. Wellness parks are being planned for the shoreline, the ships current route will disturb the natural beauty of the area being preserved for the future. The ships also impact the Ko'a (fish schools) in Kai Opae Pt. to Honokoa Point. Ship routes needs to be changed to come in from the ocean vs. along the shoreline to reduce the impact of our shoreline and gathering rights.

Response 3 to Comment O-1:

The Army's primary method of transporting Soldiers and vehicles from Oahu to Hawai'i Island is via inter-island transport following designated shipping lanes, similar to other maritime transportation in the harbor. There are other ships traveling in the harbor that are outside Army control. The Army anticipates traffic impacts to be minimal and believes that the analysis in the Final PEIS supports a determination of less than significant impact for this proposed action.

Shipping traffic to support military operations for PTA is a minor part of shipping traffic in the Hawaiian Islands. The ships taking Soldiers to train at PTA generally travel on a straight line using designated shipping lanes when entering the harbor following the range lights and do not travel along the shoreline.

4) Hawai'i Island is currently dealing with overfilled Waste and nowhere to go with it. The military buildup will increase this problem with no alternate solution. Perhaps if the military should be required to create a trash to energy plant to take care of its own waste. Everyone needs to remember we are on an island with very limited space and resources.

Response 4 to Comment O-1:

This action does not propose additional training at PTA, and therefore, the Army does not expect the rate of solid waste generation to increase. The Army is concerned about landfill capacity on the island of Hawai'i. The NREL Net Zero report, described in Section 3.16, identified a waste-to-energy plant as one recommendation for consideration at PTA but there are no immediate plans to build one. One option the Army will be reviewing the testing of a high-tech trash disposal system, the Micro Auto Gasification System (MAGS), by the Marine Corps conducted in January 2013 at PTA. The MAGS may be a possible solution to help Soldiers reduce trash at remote forward operating bases (FOB) at the Company-level.

5) Public notices need to be continued and increased to inform the public when the troops are moving to decrease the impact on the movement of the traffic.

Response 5 to Comment O-1:

The USAG-HI works with the Military Services to provide media releases announcing advanced notice to newspaper and radio stations of upcoming training activities occurring at PTA. The Army will continue to provide these notices for public awareness of training activities at PTA.

Comment O-2: Jennifer Ruggles, Global H.O.P.E. (Hawai'i's Organization for Reuse and the Environment, P O Box 794 Mountain View, HI 96771

As a representative of over 30 people in our organization and a tax payer, I respectfully do not support this Draft Programmatic EIS for Modernization of Training Infrastructure and Construction and Operation of Infantry Platoon at Pohakuloa Training Area. There are many un-answered questions and the general public does not support any further military expansion on this island. Please consider a more through draft addressing all of our concerns or alternatives to this expansion weighing its necessity. As far as questions to address there are too many to fit on this form. If the military does go through on this program it will be in direct violation of the public's will, therefore a travesty of justice. Please do consider alternatives.

Response 1 to Comment O-2:

The EIS has been revised to address concerns noted by federal, state and local agencies and the public.

Comment O-3: Cory Harden, Sierra Club, Moku Loa Group, P O Box 1137 Hilo, Hawai'i 96721

EXECUTIVE SUMMARY

“2010 surveys for cultural resources and sensitive biological resources were conducted and both were found to be present on the proposed range area. The Army has initiated consultations with the State Historic Preservation Division (SHPD) and the U.S. Fish and Wildlife Service (USFWS) to fully identify the potential impacts and mitigation and conservation measures required before implementing this alternative.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai'i, p. ES. 6-7]

Analysis should have been included in this DEIS for public review.

Response 1 to Comment O-3:

Please see the response to comment F1. While the preferred course of action is for the Army to have completed or be close to completing needed consultation, these are separate obligations that do not always proceed in an ideal manner. That being the case, the Army still believes that there was enough information provided during the public comment period such that the public had a meaningful opportunity to comment.

1.3 BACKGROUND FOR THIS PROGRAMMATIC EIS

“...any resulting decision from this Programmatic EIS will not increase training at PTA...No additional units over historical levels would travel to PTA...some units may fire more ammunition...” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai'i, p. 1-18]

“Starting in 2001 when units began deploying to Iraq and Afghanistan, the frequency of home station training at PTA decreased. As the Army moves toward a sustainable operational tempo and begins to draw down forces overseas, units will redeploy to Hawai'i. The “dwell time” (or time spent at home station to reset and retrain) will mean that training at PTA will return to the previous (historic) levels.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai'i, p. 1-20]

“In the future, as Iraq and perhaps Afghanistan wind down, there will be an increased need to provide home-station training for a greater number of Hawaii-based troops, and Pohakuloa will become even more key, the Army said.” [Upgrade in sight, Star-Advertiser, 1-22-11]

Specify annual numbers for--

soldiers from Army, Navy, Marines, National Guard, foreign forces, and other users of Pohakuloa boats and trips between O'ahu and Pohakuloa

convoys
 days of training
 various types of ammunition
 military vehicles
 water trucks

for each of these scenarios—

training before Hawai'i soldiers deployed to the Iraq and Afghanistan
 training after Hawai'i soldiers return from Iraq and Afghanistan
 after IPBA is complete
 after modernization is complete

Response 2 to Comment O-3:

The PEIS has been revised to a project-specific EIS for the construction and operation of an IPBC; the programmatic portion has been deleted. The Proposed Action does not involve the acquisition of additional land or live-fire training exercises conducted outside the approved/existing PTA impact area. Additional text has been added to Chapter 1 of the Final EIS to define 'historical levels of training' at PTA. Tables in Chapter 2 provide annual ammunition expenditures and weapons list for the proposed IPBC. Quantification at the level proposed above is beyond the scope of this EIS.

1.5 NEED FOR THE PROPOSED ACTION

1.5.1 Need for ranges

Increased Dwell Time

“...increased dwell time that provide[s] more time at home station for units and Soldiers to Reset.”
[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai'i, p. 1-28]

Families can't come to Pohakuloa. Specify how much longer soldiers would be away from their families if this training was done in the States.

Response 3 to Comment O-3:

Soldiers would be required to stay 30 plus days per rotation or longer to make CONUS deployments economically feasible. This is the length of deployment to Fort Irwin, California. According to Chapter 1.3.1, deployments to PTA could also last up to 30 days. Family members do not travel to either place. The real difference between Fort Irwin and PTA is the cost of travel for personnel and equipment; a rotation to Fort Irwin is much more expensive. Fort Irwin is limited to exercises for full BCTs and can only support 10 such exercises each year. Fort Irwin also serves the entire Army. By contrast, PTA can host battalion size exercises.

CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION

Is military housing and/or a military exchange planned?

“Abercrombie floated the possibility of building public-private housing in West Hawai'i for military families who will relocate from Okinawa when the Marine base there moves sometime in the next few years. That base was scheduled to relocate in 2014 but it has been delayed...Another possibility could be off-base housing for troops preparing for deployment at the increasingly strategic Pohakuloa Training Area.

"PTA will be the center for training in the Pacific in the 21st century," Abercrombie said.

"It's an interesting concept," said Lt. Col. Rolland Niles, the Pōhakuloa Training Area Garrison Commander. Niles said an off-base area with a military exchange and other amenities would be welcome. 'It could be a tremendous opportunity,' he said." [Governor talks business in Kona, Hawai'i Tribune-Herald, 6-25-11]

Response 4 to Comment O-3:

The Final EIS has been revised to the construction and operation of an IPBC Range; the programmatic portion, which included military housing facilities has been deleted.

2.1 PROPOSED ACTION

"...the IPBC would incorporate the use of thermal targets, night illumination devices, and visual flash simulators." [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai'i, p. 2-9]

Describe use of lights at night and analyze impacts on wildlife, cultural practitioners, and hikers.

Response 5 to Comment O-3:

There is not an Army standard for lighting systems for the IPBC, the designer will ensure that the requirements are met with any restrictions that would apply. The minimum requirement is that the range must be designed with red and white lighting in all facilities to be used at night. Protected switching must also be provided to prevent accidental illumination of white lights during night operations. Where necessary; low-level in ground lights (similar to airfield markers) may be used for vehicle parking areas and walkways. In addition, simulation devices are used. Some types of training may require night muzzle flash simulators and hostile fire simulators. These devices will be utilized with the enemy emplacements. A night muzzle flash simulator is a flashlight-type device that is mounted on the target mechanism or coffin and flashes on the target to visually simulate enemy fire. Night muzzle flash simulators are self-contained units provided and installed by the target provider (USCOE Design Guide for the Sustainable Range Program (CEHNC 110-1-23 1December 2004)). Furthermore, the IPBC is being constructed in a designated impact area. No civilian traffic is permitted.

The EIS should have a map and text indicating the exact location of the proposed access road.

The access road is described--

2.1.3 IPBA (Activity Group 1) – 1st Modernization Project

IPBC Construction

"The entire developed footprint of the IPBC would be approximately 110 acres...and includes an access road to access the IPBC, the...ROCA...objectives with targetry...and maneuver lanes..."

Access Road

"Since there is limited access to the impact area presently to any of the proposed IPBA/IPBC sites, the Army would need to construct an access road. D-9 bulldozers would be used to ground soften lava to create the road. The road would be sited around known MEC/UXO. Geotechnical surveys would be completed in advance of ground softening to ensure no large subsurface voids lie beneath the lava surface that could endanger the lives of authorized personnel operating in the proposed IPBA/IPBC area³⁰. The USACE has planned for the IPBC access road to be approximately 2,011 m (6,600 ft) long and 7.3 m (24 ft) wide." [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai'i, p. 2-5 to 2-6]

1.2.1 Determining training support infrastructure requirements (roads and utilities)

“New roads are needed when...Building new infrastructure (such as ranges...) and new roads are requirement to access those facilities.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA)*, Hawai‘i, p. 1-10]

But the access road is not shown on any map, and the text does not specify location—

Response 6 to Comment O-3:

Section 2.7 identifies that if the preferred alternative were selected, an access road would be made from Charlie’s Circle Road, south toward the proposed IPBC. The proposed access road will lie within the existing boundaries of PTA. However, the exact layout is to be determined based upon cultural, biological, and constructability issues along with the course of action given in the Record of Decision by the decision maker.

2.2 ALTERNATIVES

2.2.2 Tier 1: Modernization

2.2.3 Tier 2 (Site Specific): Construct and Operate the Infantry Platoon Battle Area

2.2.3.1 Alternative 1 (Preferred Alternative): Western Range Area

Supporting Infrastructure (Roads and Utilities)

The nearest roads to the Western Range Area preferred IPBA alternative are Charlie’s Circle road and MPRC road. If the preferred alternative were selected an access road would be made from Charlie’s Circle Road, south toward the proposed IPBA. Utilities for the IPBA would tie into existing utilities running from the MPRC road. The access road and supporting facilities at the IPBA is discussed in greater detail in Section 2.1.3.1.

The Army is considering an alternative access road to reach the Western Range Area alternative, which would extend from MPRC Road in the west of the impact area, east toward the IPBA. Additional surveys for cultural resources and threatened and endangered species would be conducted outside the impact area between MPRC Road and the IPBA. The Army is in the process of consulting with the appropriate regulatory agencies on the proposed action. Neither road alternative is located within a flood plain.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA)*, Hawai‘i, p. 2-35]

Any actions near the MPRC should be evaluated in light of the 1989 EIS lawsuit.

“Under the Endangered Species Act, the Army must conserve listed species. But several notable cases in the 1980s and ‘90s suggested the Army felt it had other priorities. Among the cases was the Army’s construction of a \$30 million Multipurpose Range Complex (MPRC) in Kipuka `Alala with environmental assessments that the Army itself later acknowledged as inadequate. As a result of a lawsuit, the Army can use the MPRC only after it completes an environmental impact statement and undertakes mitigation for the damage inflicted by construction of the range - steps that the Army has not yet taken. A lawsuit stopped the Army from using the training complex.” [Environment Hawai‘i, October 2000]

“...the Army’s \$30 million Multipurpose Range Complex at Pohakuloa remains idle after a lawsuit alleging that its construction harmed the dryland habitat of endangered plants.” [Gung-ho for green, Honolulu Star-Bulletin, 11-11-01]

Response 7 to Comment O-3:

Section 2.7 identifies that if the preferred alternative were selected, an access road would be made from Charlie's Circle Road, south toward the proposed IPBC. The Army identifies impacts throughout the relevant ROI; the ROI varies for the different resource areas. The Army will adhere to the requirements set forth in the 2013 BO. The Army was fully aware of the MPRC and associated restrictions as it prepared the EIS. Very few impacts would affect the MPRC or the area it occupies called Training Area 23. Chapter 2.6 notes that the surface danger zones for the Charlie Circle alternative could fall within some portions of Training Area 23. This factor will be considered when a decision is made.

2.1.3.2 IPBA Operation**Travel to PTA**

“No additional Army units would travel to PTA to use the IPBA...” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 2-17]

See comments on 1.3.

Response 8 to Comment O-3:

The proposed access road will lie within the existing boundaries of PTA. Section 2.7 discusses the access road: "The USACE has planned for the IPBC access road to be approximately 2,011 m (6,600 feet) long and 7.3 m (24 feet) wide." [preferred alternative] However, the exact layout is to be determined based upon cultural, biological, and constructability issues along with the course of action given in the record of decision by the decision maker.

2.2 ALTERNATIVES**2.2.2 Tier 1: Modernization****2.2.2.3 Modernization Screening Criteria****Location**

“The proposed project must be located at PTA.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 2-32]

A more thorough evaluation should be done for doing the training at alternate locations outside of Hawai‘i.

If this project could not be done, how would the training be accomplished?

Response 9 to Comment O-3:

With the current and projected reductions in DoD budgets, movement of Soldiers and their equipment between mainland installations and their Hawaiian home station would be financially and logistically unreasonable. The financial management at all levels of DoD is to adequately resource commands to execute directed missions in support of national interests. Inherent in the execution of that mission is the legal, ethical and cost-effective use of financial resources by all commanders and their financial/resource managers. One hundred percent visibility, accountability, transparency, oversight, and controls are required for all contingency operations dollars (HQDA, Army Financial Management Guidance in Support of Contingency Operations, 09 Feb 11). Using assets in the mainland away from home station is beyond the scope of this action and consideration of not using DoD assets is not a viable or feasible option and is therefore not under evaluation. These alternatives would not meet the Purpose and Need of

the proposed action if this project could not be done to train Soldiers as best we can with our current ad hoc and substandard training facilities.

Evaluate the need to train at Pohakuloa in light of the following:

“In recent years the military has exported some of its training to the mainland with additional time spent at facilities such as the National Training Center at Fort Irwin, Calif....Army officials say an extra two weeks of training time on the mainland to make up for Hawai‘i training shortcomings adds an additional \$8 million onto the usual \$24 million trip.” [Upgrade in sight, Star-Advertiser, 1-22-11]

“...the Army hasn't done any live-fire training in Makua since 1998...out of the last 12 years, there have been nine years without a single shot fired. And as you know, during that period of time, particularly from 2001 onward, the Army has been deploying constantly to combat theaters and they've been training their soldiers elsewhere. So...not only can the Army get by without live-fire training at Makua, it has.” [David Henkin: The lawyer for Earthjustice won a long campaign to stop the Army's live-fire training in Makua Valley, Honolulu Star-Advertiser, 1-21-11]

“Earthjustice attorney David Henkin...said [moving] ‘the combined arms live-fire exercise to Pohakuloa...took basically a decade of advocacy before the Army would even admit [it] was a feasible alternative.’

In 2007 the Army said in a report to Congress that a return to company-level training at Makua was ‘absolutely critical’ and the only theoretically possible alternative was to spend up to \$600 million to build up the Pohakuloa site, an effort that would take 12 years.

Army officials now say they hope the new battle course—more than 2 miles long and nearly 1 mile wide--can be completed about 18 months after the projected start date in 2013.” [Army ends live-fire training at Makua, Star-Advertiser, 1-13-11]

Response 10 to Comment O-3:

The Army conducted limited live-fire training at MMR between the 2001-2004 timeframe, based on the 2001 Settlement Agreement. The 2007 report is correct in that it would take 12 years to complete modernization of PTA, if funding were available. The construction of the IPBC can be completed in roughly 18 months. This range will not eliminate the need for training ranges on O‘ahu. This is also not a Company-sized facility, such as the one that exists at MMR. Additional information about the relationship between the Proposed Action in this EIS and MMR is now included in Section 2.4.1.1.

3.1 LAND USE AND RECREATION

3.1.1 Introduction and Region of Influence

“The ROI for PTA includes all the lands within PTA’s boundaries, and land directly adjacent to PTA.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-1]

The ROI should be larger. People report hearing Pohakuloa noise from Laupahoehoe and Mauna Loa.

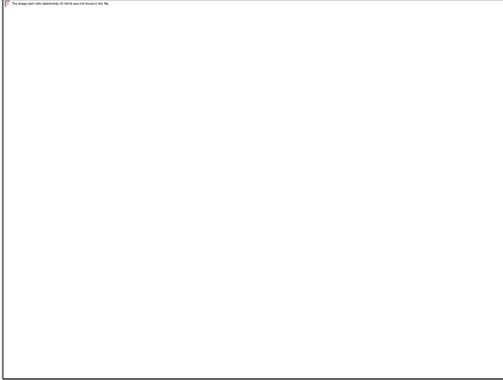
Response 11 to Comment O-3:

The ROI for noise is determined by noise contours, which denote the extents of noise impacts which are incompatible with surrounding land uses. Although noise may be audible from locations beyond the extents of the contours, areas located outside of the noise contours are considered to receive a level of noise which is compatible with all land uses. Please see the updated noise impact analysis in Section 4.5 of the Final EIS.

3.4 AIR QUALITY

Include and analyze this photo, one of three sent by a friend who e-mailed:

“Here are three photographs of the River of Dust blown down from PTA by strong winds. It was just south of the junction with the Waikoloa Village Road and the upper Mamalahoa Highway heading to Kailua town. November 19, 2003 is on the date stamp.”



Response 12 to Comment O-3:

As identified in Section 4.4.3, potential impacts on air quality from construction activities and training will be managed through development of a Dust and Soils Mitigation Monitoring Plan. The plan would address mitigation measures such as, but not limited to, restrictions on the timing or type of training during high-risk conditions, dust monitoring and control measures, vegetation and soil monitoring, use of periodic application of water or dust control palliative products, use of washed gravel on military vehicle trails, and buffer zones to minimize dust emissions.

3.4.6 Climate and Meteorology

“Though the trade-winds are fairly constant in speed and blow a high percentage of the time across the ocean and onto the island, the relatively uniform trade-wind flow is distorted and disrupted by the mountains, hills, and valleys. The average annual wind speed reported at BAAF is 11.9 mph.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-22]

Information on intermittent high winds should be included. See also comments on 3.4.

Response 13 to Comment O-3:

During the 2006 - 2007 TSP/PM10 monitoring, the highest 1-hour wind speed recorded on seven meteorological stations at PTA was 30 mph. However, average hourly wind speeds were light to moderate, and exceeded 18 mph only 2% of the time.

3.4.7 Monitoring Data

“Although there has been no long-term ambient air quality monitoring at PTA, air quality is generally considered to be good (USARHAW and 25th ID(L), 2001) (USAG-HI, 2009a). A 12-month air monitoring program was conducted at PTA during January 2006 to January 2007. The primary purpose of this monitoring effort was to determine the impact of fugitive dust from training activities at PTA. Seven monitoring stations were located at remote sites around the installation. Figure 3.4-1 illustrates the location of the air quality monitoring stations at PTA. Almost all of the monitoring data collected in recent years for the area shows that ambient air quality levels remain well below the values of the relevant State and NAAQS. Only the State and Federal 24-hour PM-10 standards have ever been approached (State of Hawai‘i, 2010; USAEC, 2009b).” [Draft PEIS, Modernization of Training Infrastructure and

Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-23]

What substances did the monitoring try to detect and with what methods? Sierra Club and others have questioned methods used for DU.

Response 14 to Comment O-3:

The 2006 - 2007 monitoring program described in Section 3.4.7 of the EIS did not include monitoring for airborne uranium. The 2006 - 2007 program was to collect data on particulate matter ten microns or less in diameter (PM10) and total suspended particulates (TSP), in support of the Stryker EIS mitigation measures. The sampling method included the use of two different types of air sampling stations - a federal reference method (FRM) high volume (HIVOL) PM10 sampler was used for the base station, and a portable PM10 and portable TSP sampler was used for the six remote sampling stations. Sampling was conducted in accordance with EPA quality assurance guidelines and sampling station manufacturer guidance. The sample filters were weighed at laboratories to determine the amount of PM10 and TSP collected. The results indicated that TSP and PM10 concentrations in the PTA area are well below State and Federal ambient air quality standards. Airborne uranium monitoring is discussed in Section 3.12.3.1 of this EIS.

Air monitoring is vital because no one knows what hazardous substances may lie forgotten on military bases, or if they are being hit by bombs and explosives. There were surprise discoveries of DU at Schofield and Pohakuloa in 2005, with DU also suspected at Makua. Chemical weapons, some with unstable fuses, were found at Schofield between 2004 and 2006. Witnesses said the weapons contained mustard (which causes blistering), phosgene (which causes lung damage) and chloropicrin (which causes fluid to enter the lungs).

Response 15 to Comment O-3:

Thank you for your comment. The Army agrees that air monitoring is an important environmental concern. Airborne uranium monitoring was conducted at PTA from February 2009 to March 2010, and at Ke‘āmuku from April 2007 to 2008. Monthly reports for the PTA 2009-2010 airborne uranium monitoring are available on the Garrison DU website.

Figure 3.4-1. PTA Monitoring Sites (2006-2007)

There are no monitoring stations in the south, or the southwest-- the most likely place to pick up any problems since prevailing winds blow out of the northeast. [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-24]

“There is a general dominance of trade-wind flow from the northeast.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-21]

Response 16 to Comment O-3:

During the 2006 - 2007 TSP/PM10 monitoring, the wind direction recorded at six meteorological stations on PTA was predominantly west northwest during the daytime when most dust-generating activity takes place on training areas and ranges. At Station 2 (farthest southeast station), the daytime wind direction was predominantly southeast. Page 3-21 of the EIS has been revised to reflect this.

Based on this wind direction data, two (2) of the stations were downwind and five (5) of the stations were upwind from training areas. The report for the 2006 - 2007 TSP/PM10 monitoring found that TSP concentrations at the downwind stations were greater than at upwind stations, and PM10 concentrations at both upwind and downwind stations were the same. Both TSP and PM10 concentrations were below state and federal air quality standards.

3.5 NOISE

3.5.2 PTA Cantonment Area

“Zone II noise conditions extend beyond the limits of PTA in an area southeast of the PTA Cantonment Area that is designated forest reserve. Public access [sic] is granted to the Forest Reserve, permit required, for hunting and special uses (e.g., weddings, parameters of that study include noise impacts to the Forest Reserve adjacent to PTA. community events, etc.). Noise impacts to the forest reserve are not well documented. The Army has committed to conduct a noise study for impacts from a separate proposed project (HAMET EA), which is unrelated to the activities proposed in this Programmatic EIS. The parameters of that study include noise impacts to the Forest Reserve adjacent to PTA.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-32*]

[noise] “Zone II — Normally incompatible with noise-sensitive land use” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-30*]

The EIS should state that noise levels are inappropriate for the area.

The EIS should include the HAMET noise study for public review.

Response 17 to Comment O-3:

The Army completed modeling of potential noise impacts at both alternative locations for the proposed IPBC: the Western Range Area (preferred alternative) and Charlie’s Circle. A copy of the noise modeling results are included in Appendix F of this Final EIS. In March 2011, the U.S. Army Public Health Command (USAPHC) performed an Operational Noise Assessment for Proposed Infantry Platoon Battle Area at Pōhakuloa Training Area, HI (USAPHC, 2011a). The USAPHC modeled CDNL contours for the proposed IPBC in the Western Range Area. In May 2011, the USAPHC prepared an addendum to its March 2011 analysis for the hardening of targets at the proposed IPBC in the Western Range Area to support aerial gunnery training (USAPHC, 2011b). In September 2012, the USAPHC prepared a revised Operational Noise Assessment for Proposed Infantry Platoon Battle Area at Pōhakuloa Training Area, HI (USAPHC, 2012). This analysis updated the May 2011 addendum results and incorporated an analysis of the proposed IPBC at Charlie’s Circle alternative; reflected adjustments in the aerial gunnery training and non-standard ground based activity (such as Carl Gustav Recoilless Rifle FFV552 training practice round, .50 caliber sabot light armor penetrator tracer [SLAP-T], TOW Missiles [inert], AT-4 Rocket 9 mm training round, mortars, hand grenades, simulators, and demolition charges) at both IPBC alternative locations. The USAPHC modeled noise contours for large and small caliber weapons use and aerial gunnery training at both IPBC alternative locations analyzed in this EIS. The noise levels associated with the Proposed Action were reviewed to determine if they were compatible with surrounding land use (both on and off-post) and if the addition of the proposed IPBC would change noise zones beyond the boundary of the installation. Except for small portions along Infantry Road the noise zones remain within the PTA boundary; along Infantry Road, Zone III extends less than 656 ft (200 m) beyond the boundary and within this area is forest reserve land. Figures 4.5-2 and 4.5-4 of the Final EIS show the Zone II and III noise contours for cumulative demolition and all large arms activities (existing General Range Area, proposed IPBC, and aerial gunnery operations). Although this expands the noise zones near the IPBC, the additional activity would have no significant adverse effect beyond the PTA boundary. Existing noise conditions are within Zone I; therefore, the noise impacts within the PTA are considered less than significant. Existing noise conditions are discussed in Section 3.5 and potential noise impacts from the proposed IPBC are presented in Section 4.5 of the Final EIS.

The Finding of No Significant Impact for the HAMET EA is available at the Internet Web site: <http://hawaii.gov/dlnr/chair/meeting/submittals/110909/HAMET-Appendix-Final.pdf>

“The noise contours generated consisted of training data during the daytime (7 a.m. to 10 p.m. [0700-2200]), and nighttime (10 p.m. to 7 a.m. [2200-0700]), provided by PTA from September 30, 2007 through October 1, 2008...” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-35]

Does this data represent a worst-case noise scenario? That’s what should be used.

Response 18 to Comment O-3:

In compliance with CEQ NEPA regulations this data represents large caliber weapons used from a 250-day operating period occurring between 9/30/2007 to 10/1/2008. As such, this is not a worst-case scenario, but instead total operations from the time period. The CEQ NEPA regulations no longer require presentation of a worst-case scenario.

See comment on 3.1.1.

Response 19 to Comment O-3:

The ROI for noise is determined by noise contours, which denote the extents of noise impacts which are incompatible with surrounding land uses. Although noise may be audible from locations beyond the extents of the contours, areas located outside of the noise contours are considered to receive a level of noise which is compatible with all land uses.

Residents should be interviewed to see how noise affects them.

Response 20 to Comment O-3:

From the noise modeling, Zone II noise conditions extend beyond the limits of PTA in an area southeast of the Cantonment Area that is designated forest reserve. Public involvement is an integral component of the NEPA process and residents in the area and Hawai‘i Island were provided opportunities to comment during scoping and public hearings related to the Draft EIS.

Noise carries in unusual ways in Hawai‘i, perhaps because of underground cavities. I can hear a truck crossing a bridge half a mile from my house in Mountain View. A friend in Kurtistown reports hearing people talking over half a mile away.

Response 21 to Comment O-3:

Available noise models do not have the capability to predict noise levels from underground cavities - they can only predict sound travelling through air above-ground.

Table 3.5-4. Large Arms Utilization – Existing Conditions (Day and Night)

[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-35]

What unit of measure is used?

Response 22 to Comment O-3:

Small caliber arms are measured using the PK15 (met) metric for which the noise contour is the loudest level that occurs, regardless of the number of shots. In contrast, large arms are measured using CDNL, a 24-hour average metric which reflects the number of shots fired over that period. The glossary contained in Appendix F explains noise measurement terms for those measurements used in the EIS. This should assist readers in understanding the metrics used for noise measurement.

3.5.3 Noise Surrounding PTA

“PTA is surrounded by forested reserve land and open area, most of which is mountainous terrain. These are considered compatible land uses.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-40]

What are noise effects on people engaged in spiritual and cultural practices, or seeking serene wilderness areas?

Response 23 to Comment O-3:0090

Results of the noise modeling show less than significant noise impacts as a result of the proposed IPBC. Please see Section 4.5 of the Final EIS. The Army recognizes that the spiritual characteristics of the area are difficult to measure in terms of archaeology or the other scientific tools at our disposal.

3.8 GEOLOGY AND SOIL RESOURCES

3.8.1 Introduction and Region of Influence

“The Army conducted an Operational Range Assessment Program (ORAP) assessment at PTA in 2009 as part of the Army’s overall SRP (USAEC, 2009c). The ORAP assessment evaluates the potential for munitions constituents of concern resulting from live-fire training activities at the installation’s ranges to move off range and impact surrounding areas. These results, as they relate to soils, will be incorporated within the ROI at PTA.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-57]

Where are results incorporated into the ROI?

Response 24 to Comment O-3:0091

The conclusions of an ORAP assessment of PTA conducted in 2010 (discussed in detail in Section 3.8.2.1, General Range Area) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the range areas and within the impact area at PTA.

Soil Contamination

“Past and current activities at PTA have resulted in contamination of soil by explosives and other chemicals. The USACE Sacramento District conducted a surface soil and surface water investigation at PTA in 2002...” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-64]

The investigation appears outdated.

Response 25 to Comment O-3:

Due to the localized nature of HM/HW effects and the characteristics of PTA, the ROI impacted by the cumulative effects of HM/HW is limited to the boundaries of PTA. The lack of surface or groundwater greatly reduces the probability of contaminant migration in both the Cantonment Area and Range Area. The 2002 report has 46 soil samples and provides helpful information even though the 2010 ORAP is more recent. The conclusions of the 2010 ORAP assessment of PTA (discussed in detail in Section 3.8.3.1) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the range areas and within the impact area at PTA. This assessment will most likely be updated in the future as funding and direction are provided by the Army.

Operational Range Assessment

“After an assessment of 153 operational ranges (including firing points) at PTA, the Army found that migration pathways contaminants would use to leave the Range Area do not exist at PTA due to the lack of surface water and the great depth to groundwater, and are further hindered by low annual precipitation, highly permeable soils, and densely vegetated washes.” [*Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-66*]

Response 26 to Comment O-3:

The Army comprehensively studied airborne DU, including analyzing the potential for DU migration on-post and off-post. Ultimately, the Army concluded that DU was not likely to migrate for reasons including, but not limited to: (1) After almost 50 years, the DU is still mostly in metallic form (fragments or intact), attributable to the low-oxidizing, arid climate at PTA. This form makes the DU unavailable for transport into air, water, biota, and soil (Army Response to US NRC Proposed License Conditions for Davy Crockett M101 Spotting Round Depleted Uranium); (2) The conclusion of the Baseline Health Risk Assessment for Residual Depleted Uranium at the PTA (2010) that consideration of off-post receptors was not necessary, because the results of the airborne DU studies showed that there was no complete pathway for humans residing or working near PTA. If an exposure pathway is demonstrated to be incomplete, there can be no exposure via that pathway and thus, no risk; (3) Soil sampling results from the independent, privately funded Waiki‘i Ranch Homeowners' Association Depleted Uranium Report (2008). The Waiki‘i Ranch is the closest civilian community to PTA. The Waiki‘i Ranch report determined that a statistically insignificant amount of DU (i.e., less than background levels of DU) was present at the property, in spite of historical activities that could have aerosolized DU, and historical wind patterns that could have transported DU; (4) Even if DU becomes aerosolized, the DU's density makes it unlikely that airborne migration and deposition would occur more than approximately 328 feet (100 meters) from the source (Army Response to US NRC Proposed License Conditions for Davy Crockett M101 Spotting Round Depleted Uranium); and (5) Bombing exercises by other military services will not occur in the area with the DU, thus eliminating specific actions with the capacity to change the form of the DU. High explosive ammunition would only be used after further consultation with the NRC and demonstration that migration of DU would not occur.

Migration by air should be evaluated, especially for DU, and possible releases from bombs and projectiles landing in the impact area, which has unknown hazards from decades of past training.

Was the impact area evaluated?

Response 27 to Comment O-3:

Yes. The impact area is a 51,000 acre artillery area within PTA (DPEIS at ES-1), and includes the areas determined to potentially contain DU. Visual surveys were conducted over the entire impact area. Based on certain criteria necessary to support the Davy Crockett, the Army narrowed the number of probable DU-containing ranges within the impact area to four. Those ranges are Ranges 11T, 10, 14, and 17 (2009 Aerial Tech Memo). DU reconnaissance was conducted on those four ranges, including aerial and ground gamma surveys, soil, water, and air sampling, historical research, and other means of evaluation.

Each of the two IPBC alternatives are found within the existing impact area at PTA. They do not conflict with Improved Conventional Munitions (ICM) restricted area within the impact area; and do not conflict with known sites containing depleted uranium (DU). Because Army Regulations prohibit use of DU in training, the Army does not use munitions that contain DU on its training ranges in Hawai‘i. There are no planned uses at the IPBC that could conceivably result in airborne DU hazards. The migration of DU off the military installation is highly unlikely. Studies have shown that DU transport is limited and that it is unlikely to move from the range under most conditions. Studies also have shown that the DU fragment size and the environmental conditions at the ranges in Hawai‘i serve to prevent migration, including air.

The U.S. Army Installation Command has applied to the Nuclear Regulatory Commission (NRC) for a license to possess and manage residual quantities of DU at various Army installations where DU munitions, specifically the M101 Spotting Round, were used in training exercises. These installations include the Schofield Barracks and PTA. The Environmental Radiation Monitoring Plan for PTA was submitted to Nuclear Regulatory Commission Office of Nuclear Material Safety and Safeguards for approval on 3 February 2012. On 10 September 2012, the Army responded to the NRC's proposed license conditions with supporting data and test results. Based on those results, the Army maintains that the air sampling it conducted unequivocally demonstrates that additional sampling is not necessary, and would provide no benefit to human health and safety or the environment. Following a December 2012 technical meeting, the Army provided a second response to the proposed license wherein the Army reiterated its statements regarding air sampling, but agreed to conduct a single sampling event at the Schofield BAX. This sampling event will provide the site specific data requested by NRC. The Army and the NRC continue to coordinate to determine the best approach for DU management at PTA and the licensing process has continued into early 2013. The license, once granted, will require the Army to perform specific functions designed to protect public health and safety and the environment. These include a radiation monitoring program and physical access control consistent with NRC's regulations for protecting the public against radiation. Should DU be discovered elsewhere on Army installations, the Army will conduct an environmental survey to determine if that area needs to be included in the monitoring and access control programs under the license. These programs will support future site decommissioning and cleanup.

3.9 BIOLOGICAL RESOURCES

3.9.1 Introduction and Region of Influence

“...Shaw and Castillo (1997) report on data from the late 1980s; current vegetation community types in the Cantonment Area will be surveyed and updated in the near future.” [*Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-70*]

Updated surveys should have been done for this EIS.

Response 28 to Comment O-3:

Please see Response 1 to Comment F-1. While the preferred course of action for the Army is to have completed or be close to completing needed consultation, these are separate obligations that do not always proceed in an ideal manner. That being the case, the Army still believes that there was enough information provided during the public comment period such that the public had a meaningful opportunity to comment.

3.9.3 PTA Range Area

3.9.3.2 IPBA at Western Range Area

Listed Vegetation and Critical Habitats

“...The Army intends to complete its survey of the selected access road by late 2011. The results of these surveys will be included in the Army’s consultations with the USFWS. The Army is currently completing a BA based on its survey findings of the Western Range Area alternative. Once complete, the Army will formally enter into Section 7 consultation with the USFWS under the ESA of 1973. The USFWS will issue a BO based upon that consultation. The results of both regulatory consultations, and any recommended mitigation or conservation measures, will be included in the Final Programmatic EIS.” [*Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-87*]

Surveys should have been completed and included in the Draft PEIS for public review.

Response 29 to Comment O-3:

Please see the response to comment provided directly above.

Listed Wildlife and Migratory Birds

“The Hawaiian hoary bat is ubiquitous at PTA and it is highly likely they are present in the area based on current and past Hawaiian hoary bat monitoring data at PTA (Schnell, 2011). The Western Range Area contains woodland habitats which may be potential roosting habitat for Hawaiian hoary bats... The Western Range Area is likely to contain migratory birds similar to those present at other locations on PTA (discussed above in Section 3.9.2).” *[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-91]*

Impacts to the bat and migratory birds are unacceptable.

Response 30 to Comment O-3:

Please see the response to Comment F-1. The Army is in compliance with the 2003 Biological Opinion issued by the USFWS. The EIS indicated that migratory birds would be disturbed under the Proposed Action. This disturbance is "acceptable" in a legal sense because the Proposed Action is a "military readiness activity" as defined in the Migratory Bird Treaty Act. Nevertheless, the Army is acting to minimize the disturbance through wildfire control measures and other actions. We appreciate your comment and recognize your concern.

3.10 CULTURAL RESOURCES**3.10.1 Introduction**

“...the Section 106 consultation process is currently underway for the proposed IPBA in the Western Range Area.” *[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-98]*

Consultation should have been completed and reported in the Draft PEIS for public review.

Response 31 to Comment O-3:

The NEPA EIS review and NHPA Section 106 review are parallel but separate processes. While the preferred course of action for the Army is to have completed or be close to completing needed consultation, these are separate obligations that do not always proceed in an ideal manner. That being the case, the Army still believes that there was enough information provided during the public comment period such that the public had a meaningful opportunity to comment.

3.10.2 Region of Influence

“The ROI for the programmatic action is all of PTA. The ROI for the IPBA is the APE...” *[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-98]*

The ROI should be larger, since in Hawaiian culture relationships between areas miles away on the same island, and on other islands, are significant. See also 3.10.3.1 below.

Response 32 to Comment O-3:

The ROI is a term under NEPA, APE is a term under the NHPA. This ROI is consistent with previous NEPA documentation and federal regulations. A copy of the Final Programmatic Agreement is included in Appendix D; Section 4.10 of the Final EIS has been updated with information and mitigation measures provided in the Programmatic Agreement.

3.10.3.3 Native Hawaiian Sovereignty

“The overthrow of the Kingdom of Hawai‘i and subsequent loss of Native Hawaiian Sovereignty continues to be an issue of great concern...” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-104]

The Army is to be commended for apparently being the first branch of the U.S. military to acknowledge this in an Environmental Assessment or Environmental Impact Statement.

Response 33 to Comment 0-3:

The Army has noted your comment.

3.10.6.1.1 IPBA at Western Range Area

“The APE [Area of Potential Effect] for the Western Range Area (Preferred Alternative) is the footprint of the proposed IPBC...” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-113]

See comment on 3.10.2.

“The information contained in this section, unless otherwise noted, is from the *Draft Archaeological Reconnaissance Survey Report of Infantry Platoon Battle Course...*” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-113]

This report should be in the appendices for public review.

Response 34 to Comment 0-3:

Please see Response 15 to Comment F-2.

“Additional surveys will need to be conducted in this area [IPBC APE] if the Army determines it will use the MPRC Road access road alternative over the Charlie’s Circle Road access road alternative.

...Studies are underway to determine how the pits were possibly used pre-contact; a draft report is expected in June 2011...A report detailing the results of the Phase II survey is expected to be available in Spring 2012. In addition, an archaeological survey will need to be conducted for a small parcel of land at the northeast portion of the proposed IPBC to provide improved access to the range in that area. The Army anticipates that that survey will be completed in late 2011, and a report will be made available in Spring 2012.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-113 to 114]

The surveys should have been completed and included in the EIS for public review.

Response 35 to Comment 0-3:

Please see Response 15 to Comment F-2. While the preferred course of action is for the Army to have completed or be close to completing needed consultation, these are separate obligations that do not always proceed in an ideal manner. That being the case, the Army still believes that there was enough information provided during the public comment period such that the public had a meaningful opportunity to comment.

3.10.7 Cultural Resources Surrounding PTA

“The cultural resources surrounding PTA must be considered for the proposed action. Although the Army does not own or control the land that contains these resources, it is important to note their present condition and analyze the impacts of the proposed projects on these resources.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-115*]

The stated intention is commendable.

Response 36 to Comment O-3:

Thank you for your comment.

3.11 HAZARDOUS MATERIALS/ HAZARDOUS WASTE

3.11.1 Introduction and Region of Influence

“Some operations in the cantonment area may generate hazardous materials/hazardous wastes, however, these areas are highly controlled.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-116*]

See comments on 3.4.7.

Response 37 to Comment O-3:

The 2006 - 2007 monitoring collected data on PM10 and TSP, in support of the Stryker EIS mitigation measures. The sampling method included the use of two different types of air sampling stations - a federal reference method (FRM) high volume (HIVOL) PM10 sampler was used for the base station, and a portable PM10 and portable TSP sampler was used for the six remote sampling stations. Sampling was conducted in accordance with EPA quality assurance guidelines and sampling station manufacturer guidance. The sample filters were weighed at laboratories to determine the amount of PM10 and TSP collected. The results indicated that TSP and PM10 concentrations in the PTA area are well below State and Federal ambient air quality standards. Airborne uranium monitoring is discussed in Section 3.12.3.1 of this EIS. Airborne uranium monitoring was conducted at PTA from February 2009 to March 2010, and at Ke‘āmuku from April 2007 to 2008. Monthly reports for the PTA 2009-2010 airborne uranium monitoring are available on the Garrison DU website.

3.11.3 PTA Range Area

3.11.3.1 General Range Area

Lead

“Though intact lead ammunition does not readily migrate, lead particles found outside of intact spent lead ammunition may undergo corrosion and may exist in the soil as lead salts. Many of these lead salts differ from the metal in that they are more soluble in water, more easily absorbed by plants and animals, and therefore more toxic than the lead found in intact ammunition...[but] migration pathways contaminants would use to leave the Range Area do not exist at PTA...”

[Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-124*]

What is being done to clean up lead (from bullets and other sources) from the past?

Response 38 to Comment O-3:

The Army does not clear unexploded ordnance (UXO) from active ranges as part of range maintenance but UXO is cleared if construction activities or target emplacement are in that particular area. The Army

is continuing to cleanup inactive ranges under the Military Munitions Response Program (MMRP), and sites that qualify under the Formerly Used Defense Sites (FUDS) program. Lead is highly unlikely to migrate down to the drinking water aquifer. However, in general, lead does not migrate very far under most conditions either via surface water, ground water or through the air. Section 3.11.1.1 provides information on procedures followed and BMPs for lead at PTA.

When explosives land on top of lead from the past, does lead dust get into the air?

Response 39 to Comment O-3:

Yes, but not to a degree that would be expected to allow mitigation offsite from the impact area. Generally speaking, lead does not migrate very far in the air due to the heavy lead particles. The more organic material / basic minerals found within the surface materials, the greater the natural bonding of the lead to these minerals and less likelihood of migration over greater distances.

3.11.4 Hazardous Waste and Hazardous Material Surrounding PTA

Military Munitions Response Program Sites

“Humuula Sheep Station-West...Kulani Boys’ Home...Pu’u Pa’a...Waikoloa Maneuver Area’

[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-125]

It is commendable that this information on old sites near Pohakuloa and cleanup status was included. All old sites should be cleaned up before new ones are added.

The EIS should include cleanup status for the old sites below, and all 50-plus old sites on Hawai’i Island, to inform the public about cumulative effects of military actions.

OLD ORDNANCE & MILITARY SITES ON HAWAI’I ISLAND

partial list July 2003 by Cory Harden

DISTRICT	UNEXPLODED ORDNANCE	FORMER MILITARY SITES
HAMAKUA	Pepeekeo 1956 FATALITY	Jungle Training Area, North Shore Jungle Training Area near Waipio Bay Ninoole Radar Station Waipio Bombing Targets
HILO	Hilo Breakwater 2000 Richardson’s Beach 2002?	Army Impact Range, Waiakea Big Island Bombing Targets--Leleiwi Camp Furneaux General Lyman Field Hilo Prisoner of War Camp Hilo Storage Site Kalaniana’ole Camp Kaneolehua Camp Kaumana Camp Panaewa Tract 1

		Jungle Warfare Area
		LST Landing Beach
		Pi'ihonua Ordnance Storage
		Waiakea Storage Area
		Waianuenue Camp
KA'U		
		Ka La'e Military Reservation
		Kahu ku Ranch Radar Station
		Ka'u Bombing Range
		Missile Tracking Station
		Morse Field
		Pahala Hospital
		Pakini Bombing Range
KOHALA	Hapuna Beach 1998,1997,1995	Big Island Bombing Targets-- Mahukona Range Navy Rocket Range, Hawi Upolu Point
KONA		Big Island Bombing Targets— Mano Point Makolea Point Kona & Huehue Station
PUNA	Ola'a 1955	Big Island Bombing Targets— Cape Kumukahi Kaloli Point Kea'au Wahine Maka Nui Combat Training near Mt View Firing Range near Mt View Hilo Research Site (near Kurtistown) Jungle Warfare & Maneuver (Kea'au) Kapoho Target Area Pololu Olaa Mill Camp Waiakea Forest Reserve
VOLCANO		Kilauea Crater maneuver/impact area

		Kilauea Military Camp
WAIMEA/	Waimea Middle School 2002	Anti-tank, artillery, impact range
WAIKOLOA	Waikoloa fire 1998	Big Island Bombing Targets--Puako
	Anekona Estates 1998	Camp Kilohana
	Waimea country 1998	Camp Pōhakuloa—
	Chock Inn 1998	anti-tank, artillery, impact range
	Pheasant Ridge 1997	Kamuela Camp #4
	Waikoloa Elem. School 1994	Kamuela Reservoir
	O’uli Parcel about 1993	Lalamilo Firing Range
	Pu’u Pa 1983 INJURY	Mauna Loa Training Area
	Parker Ranch 1954 2 FATALITIES	Nansay Hawaii--
	Mamalahoa Hwy 1945 FATALITY	Ouli
		Puako
		Navy bombing range, Kawaihae
		Navy rocket range, Hawi
		Waikoloa Maneuver Area

Response 40 to Comment O-3:

The Final EIS includes the current clean-up status of the Waikoloa Maneuver Area. The EIS does not include information about current and former military installations on other islands. This information is beyond the scope of the EIS and does not belong in its discussion of the affected environment. However, more information about remediation site clean-ups may be obtained from the U.S. Army Corps of Engineers website (<http://aec.army.mil/usaec/cleanup/derp00.html>).

3.12 DEPLETED URANIUM

[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-126]

It is commendable that a separate EIS section was devoted to DU.

General Response: *Note that the surface danger zones (SDZs) for the proposed IPBCs do not come near the DU areas. Therefore, the proposed action will not affect the DU areas or disturb DU material in those areas.*

Response 41 to Comment O-3:

Between 1960 and 1968, the military used the M101 Spotting Round for training activities in Hawai‘i. The M101 Spotting Round was a small (about 8 inches in length and 1-inch diameter) low speed projectile weighing about one pound and containing about 6.7 ounces of DU alloy. Unlike modern DU kinetic penetrators that are designed to defeat armor and may generate a cloud of DU dust upon impact, the M101 Spotting Round was used to identify the flight path of the Davy Crockett warhead. Use of the M101 Spotting Round would have deposited DU in large fragments. When the Davy Crockett was used, its training activities were largely unknown; it was a classified weapon system and information concerning where the radioactive material was stored was closely guarded. Current Army Regulations prohibit use of DU in training; the Army and the other Services do not use munitions that contain DU or any other radioactive material on its training ranges in Hawai‘i.

3.12.3 Army Use of DU

The EIS should analyze use of DU at Pohakuloa by the Navy, Marines, National Guard, foreign forces, and all other services that train there.

Response 42 to Comment O-3:

The Army asked the Navy, Marines, and Air Force if they fired DU on PTA and each service responded in the negative. Additionally, none of the services maintain an NRC license for DU possession or use at PTA.

“In August 2005...at Schofield Barracks, an Army contractor discovered 15 tail assemblies from the M101 spotting round...After confirming the presence of DU, the Army disclosed that information to the public.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-128]

Include and analyze information below from my October 30, 2009 filing with the Nuclear Regulatory Commission. Attachments available on request.

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]

Response 43 to O-3:

The Army's response to the question excerpted by the commenter is correct, within the context of the question posed. The question was in reference to the Army's use of DU penetrators; an M101 is not a penetrator. A penetrator is a munition that uses the high density of DU to create kinetic energy that will penetrate the steel armor of an enemy target. This could, for example, be a tank main gun round. DU penetrators have never been used in Hawai‘i. Historical and current Army regulations prohibit the use of munitions that contain DU in training. Upon the Army's discovery of the DU associated with the M101s, the Army disclosed that information to the public as soon as practicable. At the time question was asked, the Army had lost the institutional memory of the use of the M101 Spotting Rounds in training from the 1960s in Hawai‘i. The EIS provides a summary of the Army Use of DU at PTA in Section 3.12.3.

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 Hawai’i, by Army Installation Management Command-Pacific, issued about 11-07]

Response 44 to O-3:

To date, the Army has collected twenty-two 55-gallon drums of material that included yellow-oxidized DU residue from the Schofield Barracks BAX site. The Army disposed of this material properly.

3.12.3.1 Use at PTA**Surveys and Studies**

When looking for depleted uranium (DU) the Army cites difficult terrain and the danger of unexploded ordnance. But for new construction, there seems to be no problem. Why?

Re. new construction—

“The proposed IPBA would be sited within the impact area at PTA where no ranges currently exist.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhākuloa Training Area (PTA), Hawai’i, p. 2-3]

“Each proposed IPBA live-fire alternative location under consideration is either in or directly adjacent to the existing impact area at PTA.” [Federal Register /Vol. 75, No. 246 /Thursday, December 23, 2010 /Notices]

“will check for DU as do new construction” *[my notes from February 3, 2009 presentation by Army Col. Killian to Hawai'i County Council]*

Re. looking for DU--

“...the vegetation was very dense, and the *[Makua Valley]* aerial survey was limited to ravines and stream beds....Physical entry to range areas was precluded by safety concerns, including the likely presence of Unexploded Ordnance...and Improved Conventional Munitions...”

[Final Technical Memorandum, Depleted Uranium Scoping Investigations, Makua Military Reservation, Pohakuloa Training Area, Schofield Barracks Impact Area, Islands of Oahu and Hawaii, prepared for Army by Cabrera Services, April 2008, p. 4-1]

“Where terrain, vegetation, and safety concerns allowed access, radiological surveys...were performed.” *[Final Technical Memorandum, Depleted Uranium Scoping Investigations, Makua Military Reservation, Pohakuloa Training Area, Schofield Barracks Impact Area, Islands of Oahu and Hawaii, prepared for Army by Cabrera Services, April 2008, p. 3-2]*

“The rough terrain limited accessibility to the suspected *[Pohakuloa DU]* impact areas.”

[Final Technical Memorandum, Depleted Uranium Scoping Investigations, Makua Military Reservation, Pohakuloa Training Area, Schofield Barracks Impact Area, Islands of Oahu and Hawaii, prepared for Army by Cabrera Services, April 2008, p. 4-3]

“The results of the MMR *[Makua]* scoping survey were limited by accessibility issues. The aerial visual observations were obscured by vegetation and no radiological measurements were performed in the impact area. Entry to the impact area was not allowed for safety reasons...CABRERA recommends the Army should...further investigate the potential for DU at the MMR if the area becomes more accessible in the future...CABRERA recommends completing the characterization of these *[potentially contaminated]* areas *[at Schofield]* while they are currently accessible...”

[Final Technical Memorandum, Depleted Uranium Scoping Investigations, Makua Military Reservation, Pohakuloa Training Area, Schofield Barracks Impact Area, Islands of Oahu and Hawaii, prepared for Army by Cabrera Services, April 2008, p. 5-1]

“Due to the steep slopes and safety considerations, a GWS was not performed of the ravines.”

[Final Characterization Report, Schofield Barracks Davy Crockett Impact Area, prepared for Army by Cabrera Services, April 2008, p. 3-5]

“UXO avoidance was practiced in other GWS *[Gamma Walkover Survey]* areas *[at Pohakuloa]* and coverage was dependent on the ability to enter an area.”

[Final Technical Memorandum for Pohakuloa Training Area Aerial Surveys, prepared for Army by Cabrera Services, July 24, 2009, p. 4-5]

“...due to both the nature of the UXO, and the extremely rugged terrain of some of the firing ranges, it is impractical to perform ground based surveys either efficiently or safely to gather data about the nature and extent of DU contamination in the impact areas of PTA or Makua.”

[Final Technical Memorandum for Pohakuloa Training Area Aerial Surveys, prepared for Army by Cabrera Services, July 24, 2009, p. 4-29]

“The area containing residual DU *[depleted uranium; area referred to is inside PTA impact area]*...contains unexploded ordnance and is not safe for Soldier or vehicle access.”

[February 1, 2010 letter from Col. Matthew Margotta, Commander, US Army Garrison-Hawai'i, to State Representative Faye Hanohano]

“MR. KLUKAN [*Nuclear Regulatory Commission*]...the sense I'm getting is the aerial surveys and

13 such were done in support of backs [*BAX—Battle Area Complex*] construction.

14 MR. KOMP [*Army*]: Yes. And, specifically, the

15 aerial surveys were done for Pohakuloa. Pohakuloa,

16 it's a primarily lava field. You've got the two types

17 of lava out there...

18 the A'a, which is the cinder-type

19 lava, you can't walk on without falling and cutting

20 yourself. The other type of lava is a pāhoehoe, which

21 is basaltic, and it has all kinds of lava tubes, so

22 that is also unsafe to walk. So, we could not do the

23 ground survey that we did at Schofield. So, what we

24 did, we knew where the DU area is, so we flew it to

25 get us a baseline, and make sure the system would

1 work, and then we took that system over Pohakuloa.

2 That was the only way we could even come up with a

3 method for finding any DU.”

[Nuclear Regulatory Commission Meeting with U.S. Army IMCOM Re: Licensing of DU from Spent “Davy Crockett” Test Rounds, November 16, 2010, transcript, pp. 109-110]

Response 45 to Comment O-3:

First, no construction activity is proposed within the areas thought to contain DU at this time. Next, if we are comparing DU with a type of activity, walking or construction, construction for recontouring is a destructive process. Rock and soil is excavated in one foot lifts with a large bucket. This process is much safer and more easily executed than traversing ‘a’ā lava on foot in search of DU. The ‘a’ā is significantly varied in size, has many crevices, and cracks underfoot. These crevices not only make it difficult to walk, but difficult to find the DU. The Army performed site reconnaissance, including soil sampling, air sampling, visual inspections, and gamma surveys (ground and air) to the extent practicable, on various occasions. So, while the difficult terrain and the presence of UXO presented challenges to site characterization, the Army is confident that its efforts to characterize the impact area were comprehensive and successful.

Given the size and terrain of PTA, reviewing the entire installation would be costly and challenging. There is a problem when constructing a range within an impact area. The presence of unexploded ordinance (UXO) in the impact area requires the use of EOD technicians to identify and clear UXO prior to construction. The total estimate for ground softening of the proposed IPBA footprint is 200 acres, a relatively small area. Therefore the detection and clearance of UXO is not an insurmountable obstacle.

Airborne DU

“The Army, in response to public concern, conducted a study of airborne DU that began in February 2009 and ended in March 2010...The sum of these reports shows that DU is not migrating off the installation via airborne pathways near any levels that would pose a human health risk.” [*Draft PEIS, Modernization*

of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-130 to 131]

Have air sampling plans changed since NRC found them deficient?

“...we have concluded that the [air sampling] Plan will provide inconclusive results... as to the potential impact of the dispersal of...DU...while the Pohakuloa Training Area is being utilized for aerial bombardment or other training exercises...the number of samples is insufficient...multiple distances should be covered...Offsite and onsite sampling should occur...The selection of optimum monitoring locations needs to be established...Continuous monitoring should be performed during the testing and also prior to and following testing to determine background conditions...” [letter from Rebecca Tadesse of NRC to Army Lt. Gen Rick Lynch, 3-9-10]

Response 46 to Comment O-3:

Because Army Regulations prohibit the use of DU in training, the Army does not use munitions that contain DU on its training ranges in Hawai‘i. There are no planned uses that could conceivably result in airborne DU hazards. The migration of DU off PTA is highly unlikely. Studies have shown that DU transport is limited and that it is unlikely to move from the range under most conditions. Studies also have shown that the DU fragment size and the environmental conditions at the ranges in Hawai‘i serve to prevent migration, including by air. The U.S. Army Installation Management Command has applied to the NRC for a license to possess and manage residual quantities of DU at various Army installations where DU munitions, specifically the M101 Spotting Round, were used in training exercises. These installations include the Schofield Barracks and PTA. The Environmental Radiation Monitoring Plan for PTA was submitted to NRC Office of Nuclear Material Safety and Safeguards for approval on 3 February 2012. The license, once granted, will require the Army to perform specific functions designed to protect public health and safety and the environment. These include a radiation monitoring program and physical access control consistent with NRC’s regulations for protecting the public against radiation. Should DU be discovered elsewhere on Army installations, the Army will conduct an environmental survey to determine if that area needs to be included in the monitoring and access control programs under the license. These programs will support future site decommissioning and cleanup. We do not believe that there are any other areas in Hawai‘i that could have DU material.

Concerns were raised by Mike Reimer, retired geologist, in 2009 about ongoing testing, and in 2010 about planned air testing. His resume is attached.

“...they are going to use filters with a pore size of 5 micrometers (microns)...I would suggest a filter with a pore diameter maybe 10 times smaller...” [e-mail from Mike Reimer to Cory Harden, 3-26-10]

“I would also look for Mo [molybdenum] and Ti [titanium], two elements used in the alloying of DU.” [e-mail from Mike Reimer to Cory Harden, 5-11-10]

“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.

Response 47 to Comment O-3:

Bombing exercises by other military services will not occur in the area with the DU, thus eliminating specific actions with the capacity to change the form of the DU.

...I must note that I had asked for [illegible] 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...." [9-25-09 e-mail from Mike Reimer to Cory Harden]

"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." [10-12-09 e-mail from Mike Reimer to Cory Harden]

Response 48 to Comment O-3:

The Army took a reasonable and prudent approach to air sampling. The Army's year-long air study accounted for DU, and while its initial air sampling (441 samples) did not, those samples were subsequently reanalyzed for DU. Any DU was well below limits. The sample size is representative and sufficient because we designed the study in accordance with accepted professional standards and EPA protocol.

"...NRC has to know the sampling is inadequate... I have given further though [sic] to what should be done for sampling and I feel a group of people getting together and discussing what could be included is a good way. Another is in the RFP process - ask the proposers what they would do in their monitoring programs rather than specify what is to be done... I felt that the contractor for the Army, Jim Morrow, was extremely knowledgeable about DU and sampling methods. He is limited by the specifications of the contract... It is claimed that the DU used here was molybdenum alloy. I have not seen studies with that as an alloy component. Jim Morrow suggested to me that the found munition rounds should be analyzed to determine the actual metal alloy content. That is easily done." [10-27-09 5:05 PM e-mail from Mike Reimer to Cory Harden]

Response 49 to Comment O-3:

The Army selected a 47 millimeter cellulose filter. This type and size of filter was selected and is appropriate because it is an industry standard for particulates and had the pore size and loading characteristics needed for the study. The alloy was manufactured with 92% DU and 8% molybdenum, resulting in approximately 7.3 oz (208.6 g) of DU per projectile. The Army studied the DU as opposed to the Mo or Ti because there was a much greater chance of finding DU, given its amount and its

radioactive signature. Note that particles smaller than 5 microns in size are not respirable; they would not enter and stay in human bodies.

The particle retention size numbers cellulose paper filters being quoted are for liquid filtration and do not represent efficiencies for air sampling with Whatman 41 paper filters. The quoted efficiency numbers for air sampling with Whatman 41 or similar paper filters utilized for the air monitoring performed are approximately 95% at 3 CFM for 0.7 micron (mean) poly-dispersed DOP particles (for 47 mm filters). That efficiency number improves with increased particle size (particles < 10 microns are considered respirable) and linear flow rate. Particle size will depend on the monitoring conditions. Typical atmospheric dust is less than 30 microns and combustion related wood or open burning is less than 2.5 microns. The air sampling performed with paper filters was valid for the conditions considered. The use of Whatman 41 paper filters for this kind of air sampling is historically and currently the standard of practice.

The size of filters referenced is not accurate; the filter size was one micron. The manufacturing of these munitions rounds in the early 1960s were manufactured following the requirements for a specific metal alloy, 92 percent DU, 8 percent molybdenum. The military specification for this alloy was MIL-U-46045 (Ord). We have no reason to believe the manufacturer did not follow the military specification.

The form of the uranium is a molybdenum alloy. According to the Archives Search Report, the primary suspected contaminant associated with the SRB is D-38 uranium alloy, also called depleted uranium (DU). An M101 Spotting Round projectile body was comprised of approximately 8 oz (226.8 g) of the D-38 uranium alloy. The alloy was manufactured with 92% DU and 8% molybdenum, resulting in approximately 7.36 oz (208.6 g) of DU per projectile.

There is no evidence or expectation of airborne transport of DU leaving the ranges.

The Army does not fire High Explosives into any DU areas. There is no evidence or expectation of airborne transport of DU leaving the ranges.

Uranium is a naturally occurring element found in soils around the world (approximately 1 part per million in all soils). The Army did not analyze for DU as the samples were consistent with naturally occurring Uranium.

The DU, where present, is expected to be intact or in large or small fragments of DU metal. After almost 50 years, the DU found by the Army is still mostly in metallic form, attributable to the low-oxidizing, arid climate at PTA. This form makes the DU unavailable for transport into air, water, biota, and soil. Under natural conditions over time, its form is not expected to change significantly. In the unlikely event that the DU is aerosolized by future HE activities in the DU areas, airborne migration and deposition is not expected to exceed approximately 100 meters from the source. Therefore, DU's future availability for transport is limited and unlikely.

Health Risk Assessment

The study assumes only 714 spotting rounds statewide, but there are two lines of evidence for over 2,000 spotting rounds at Pōhakuloa alone.

Firing 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]

Response 50 to Comment O-3:

Any number of M101 rounds other than 714 is only speculation. In addition, increasing the number of rounds by a factor of two or three has little effect on the potential migration of DU offsite or on health hazard risk assessments (two or three times a miniscule risk is still miniscule). The shipping records indicate 714 M1 Spotting Rounds were delivered to Hawai'i; there is no reason to believe there were more than that. The rounds were split for usage at PTA and Schofield Barracks, however, the Army does not know the exact number fired at each location. The Army knows that up 714 rounds were fired in Hawai'i for training at PTA and Schofield Barracks.

Training requirements

“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]*

“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]*

There is other evidence for more than 714 spotting rounds.

“Greg Komp...said 1600 was the maximum he estimates of Davey Crockett...spotting rounds fired in Hawai'i—Oahu and PTA together.” *[e-mail from Jim Albertini to Cory Harden, about 9-1-10, after attending a briefing on the HHRA]*

“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. It is highly probable that additional stocks of the Cartridge, 20 mm Spotting M101 were order [sic] from one of the Ordnance Depts (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]*

“A shipping list showed that at least 714 of the spotting rounds...were sent to Hawai'i by 1962, but it is ‘highly probable’ that more rounds were fired here, the Army said.” *[Radiation Levels Safe at Pohakuloa, Star-Advertiser, 9-1-10]*

Response 51 to Comment O-3:

The Army has referred to other figures, in addition to the 714 figure, to talk about the amount of DU on Hawai'i. Recall that the 714 figure represents the total M101s shipped to Hawai'i, and that amount was apportioned between the two training areas in some fashion. However, as the Army was continuing to gather information, it offered other figures, including 2520, 2000, 1911, and 1600, using various pieces of historical data from training, and other records, to estimate a hypothetical maximum number of M101s on Hawai'i. A figure of 1000 was used in the Army's Response to NRC Proposed License because it is an easy figure against which to scale, and calculate risk at multiple locations. The figure of 2520 was calculated before the number of training years on Hawai'i were understood, and reduced from 6 years to 3.5 years. The figure of 2000 was calculated by multiplying the maximum estimated number of pistons per range (100) x 4 ranges (400) x the maximum number of rounds-to-pistons (5). However, based on the expertise of the gunner, a soldier could have fired between 1 and 5 rounds per practice session. Additionally, the number of pistons does not differentiate or distinguish between the smaller, M28 pistons and the larger M29 pistons. Recall that only the M28 utilized the M101. The figure of 1911 was calculated multiplying 7 battalions x 1 Davy Crockett section per battalion x 2 Davy Crockett squad per section x 39 M101s rounds per squad x 3.5 years. The 1911 figure uses the best data the Army has

against which to calculate the potential maximum rounds on Hawai'i. However, it is important to note that from a radiation risk standpoint, whether the M101s at PTA number 714, 2520, or none, the risk is below the EPA's acceptable risk of 10-6.

"Greg Komp, an Army radiation safety officer... said the Army doesn't have any records here on where and how many of those 715 rounds were fired." [Army to study radiation risk, Honolulu Star-Bulletin, 4-23-08]

"...the appropriate information regarding the number of DU projectiles fired at the range and/or the exact footprint of the area of affected soil could not be reliably ascertained..." [Final Pohakuloa Training Area Firing Range Baseline Human Health Risk Assessment for Residual Depleted Uranium, June 2010, p. 1-2]

Response 52 to Comment O-3:

This is not true; the Army knows where the M1 Spotting Rounds were fired; however, the Army does not know the exact number fired at each location. The Army knows that up 714 rounds were fired in Hawai'i for training at PTA and Schofield Barracks.

Surveys didn't cover the entire base.

"The depleted uranium surveys didn't cover the entire base, but just the area the Army used for live fire training, said Greg Komp of the Army's safety office." [Army: Depleted uranium not harmful to isle, Hawai'i Tribune-Herald, 9-1-10]

There are contradictory statements about whether the spotting rounds exploded, which could have generated and dispersed the hazardous oxidized form of DU.

"The Davy Crockett M101 spotter round... did not reach high temperatures nor **explode** upon impact." [2-1-10 letter from Col. Matthew Margotta of the Army to Hawai'i State Rep. Faye Hanohano, bold added]

"The projectile body of the XM101 spotting round was made from a D-38 uranium alloy and filled with 90 grains of incendiary mix LCOP-1 and 25 grains of PETN. It contained an electric, point detonating fuse (M538) to **detonate** the projectile and produce the white smoke puff on impact (USACE, 2005)." [Final Pohakuloa Training Area Firing Range Baseline Human Health Risk Assessment for Residual Depleted Uranium, Cabrera Services, June 2010, p. 1-2, bold added]

Response 53 to Comment O-3:

A survey of the entire base was not necessary because the M101s were utilized and fired only on select ranges within the base. Those areas are Ranges 11T, 10, 14, and 17, as determined by the presence of pistons. The M101s did not explode upon impact. They had a small charge that released a cloud of white smoke for "spotting" where it landed. The DU portion of the M101 remained mostly intact even if the round fragmented upon landing. See related responses regarding the absence of evidence supporting the potential for DU to oxidize, or the absence of evidence supporting the dispersal of oxidized DU.

There should have been a search for DU from sources other than Davy Crocketts.

" 'Today, (Depleted Uranium) is not used in military training, but in the 50 and 60s it was used anytime you needed a heavy weight,' said Greg Komp, senior health physicist, Office of the Director of Army Safety, Washington D.C." [Army Reaffirms Commitment to Hawai'i on Depleted Uranium, www.army.mil, <http://www.army.mil/article/4671/>, 8-30-07]

Response 54 to Comment O-3:

The Army has no reason to believe other radioactive material is present at PTA as the only DU munitions fired were M101 Spotting Rounds. The NRC has not provided any historic licenses that indicate the use of other radioactive materials at PTA. The Army's 1961 AEC license authorized DU for spotting round purposes only. Instrument surveys would have picked up DU from any source.

Concerns were raised by Marshall Blann, consultant to Los Alamos National Laboratory 1996-2001. His lengthy resume is available on request.

Re. Final Pohakuloa Training Area Firing Range Baseline Human Health Risk Assessment for Residual Depleted Uranium, Cabrera Services, June 2010

“...if the DU is not picked up while it is in discrete pieces, the cost to do so will be prohibitive once it oxidizes and spreads.” [9-2-10 e-mail from Marshall Blann to Cory Harden]

“...if the DU comes from reprocessing spent fuel, yes, it could have higher actinides...”

Over the 53 years I have been a radiation worker, the official government standard of safe levels showed a steady decline/ revision every few years. I believe this may have gotten embarrassing after the nth revision downward, so a new standard was introduced...ALARA... ‘As Little as Reasonably Achievable.’ This is a bit contrary to stating that levels at the camp [PTA] are within limits...that would come after a cleanup. And next year’s limits would be lower...

A few years back...there was atmospheric testing of nuclear weapons. If you took the total Pu [plutonium] to Am [americium] isotopes in the fallout, and divided by the earth’s area, the dose must have been well within acceptable limits...[but] folk with detectors found ‘hot spots’, tiny particles of extremely high decay rates, which if ingested could pose serious health risks. An international treaty [footnote—Comprehensive Test Ban to ban all atmospheric testing of nuclear weapons] was signed in a time when it was really difficult to reach agreement (“cold war”) because the serious hazard of the alpha emitters to present and future generations was recognized. Indeed the area of the training camp [PTA] can be divided into the number of rounds, and a not-too-high rate of radiation found; but a worker sitting next to a buried shell has unknowingly found a ‘hot spot’, and all bets are off.” [9-3-10 e-mail from Marshal Blann to Cory Harden]

“...in the past, the published ‘safe’ doses were adjusted downward by huge factors (e.g. to 1/3 last values), and it was finally realized that there is no ‘safe’ level. Each bit of exposure increases risk of biological damage. And workers on the range (and possibly citizens outside) are subject not to average levels, but fluctuations along their daily path.

Because all labs in which I worked would immediately clean up any ‘spill’—i.e. uncontained spread of radioactive sources, the recommendation to ‘leave in place’ the contamination at the range comes as a surprise. It will not be practical to recover it all, but an action in between, coupled with procedures to mitigate spreading outside the range seems prudent...the present...report [Human Health Risk Assessment] to me has weaknesses as stated.” [9-26-10 e-mail from Marshall Blann to Cory Harden]

Response 55 to Comment O-3:

The evidence suggests that the DU has not and will not substantially oxidize due to environmental conditions on PTA (e.g. arid climate). Evidence suggests that the no clean-up action is necessary because existing DU levels are not only well below the NRC standards established for DU clean-up actions, but are also well below background. However, in the event that the Army determines that a DU cleanup is necessary and appropriate, the Army will work with the NRC to establish cleanup goals.

If the Army were to conduct DU cleanup, the Army would work with the NRC to determine the cleanup criteria.

Very little DU was found in the areas surveyed by the Army. Where the Army found DU, it was picked up and removed. The possibility for remaining "hot spots" at PTA is minimal because aerial and ground gamma surveys did not find anything. There are places, however, that could not be reached by survey, and it is possible that there could be DU there. However, even if there is DU present, the BHHRA concluded that there is no unacceptable risk presented by DU, including from a gamma exposure standpoint.

Re: Final Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys, Cabrera Services, 7-24-09

“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.

Response 56 to Comment O-3:

Virtually all M101 DU debris found to date is in the form of mostly intact rounds. Rotor wash does not suspend this DU in the air. The rounds remain on the ground, undisturbed by wind and rotor wash. Further, after years of wind exposure, DU is still detectable at low concentrations in the soil near the intact rounds. It seems unlikely that a single occurrence of rotor wash will clean the range of DU.

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.

Response 57 to Comment O-3:

This is a valid point.

These standards appear to be more applicable to soil:

- *ASTM C1000-11 Standard Test Method for Radiochemical Determination of Uranium Isotopes in Soil by Alpha Spectrometry*
- *ASTM C1345-08 Standard Test Method for Analysis of Total and Isotopic Uranium and Total Thorium in Soils by Inductively Coupled Plasma-Mass Spectrometry*

This issue will have to be addressed as additional testing occurs. It is important to remember that ammunition used at the IPBC will not affect the DU area of PTA. Therefore, resolution of this issue is not necessary to a decision on whether to build the IPBC, and if so, where.

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 252cm². At 3 meters height, the area of a sphere would be 1.13x10⁶ cm² (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 counts detected)/[(0.4 photopeak efficiency)*(0.00022solid angle)*(BR=0.26 or 0.008)]= 1.7*10⁶ or 5.5*10⁷ 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.” [e-mail dated about 7-24-09 from Marshall Blann to Cory Harden]

Concerns were raised by Lorrin Pang, head of the Maui Department of Health but speaking as an individual.

Response 58 to Comment O-3:

The aerial survey for uranium technique is a well-established standard technique. See, for example, Pitkin, J. A and Duval J. S., “Design parameters for aerial gamma-ray surveys,” Geophysics, vol. 45, no. 9 (September 1980); p 1427-1439.

[<http://funk.on.br/esantos/doutorado/ARTIGOS%20AEROGAMA/Design%20parameters%20for%20aerial%20gamma-ray%20survey.pdf>]

“They mention oxides but did not enter their factors of insolubility into the risk equation. They need to be weighted regarding their slow (50 fold) clearance from the body due to aqueous insolubility.” [9-4-10 e-mail from Lorrin Pang to Cory Harden]

Concerns were raised by Mike Reimer.

Re. Final Pohakuloa Training Area Firing Range Baseline Human Health Risk Assessment for Residual Depleted Uranium, Cabrera Services, June 2010

“...the recently released Baseline Human Health Risk Assessment from depleted uranium on the Big Island is, at best, an estimate using scant empirical isotopic data to substantiate its conclusions... The risk assessment is the conclusion of a single model approach and there are numerous models that could have been used in determining risk.

Response 59 to Comment O-3:

The Resrad code is the “standard of practice” for estimating doses and risks from residual environmental radioactivity. It incorporates federal radiological risk estimates and internationally accepted environmental transport modeling, basic human anatomical and physiological data, dose coefficients for intakes, and human respiratory tract models. The use of any other code may be subject to criticism, but not the use of Resrad, which the Nuclear Regulatory Commission, the Environmental Protection Agency, the Department of Energy, and the Department of Defense have all endorsed and accepted.

I take issue with the...claim that DU has 40 percent less radioactivity than natural uranium...It is misleading and technically wrong.... I challenge anyone to tell me in good conscience that the DU remaining at PTA from the Davy Crockett tests in the 1960s has 40 percent the radioactivity of natural uranium.

Response 60 to Comment O-3:

Considering that depleted uranium is natural uranium depleted in the isotopes with the greatest specific activity (^{234}U and ^{235}U), it is difficult to understand why one might take issue with the “claim.” It is more than a claim, it is a fact. The specific activity of natural uranium is about 0.7 microcurie per gram ($\mu\text{Ci g}^{-1}$) and the specific activity of depleted uranium is about 0.4 $\mu\text{Ci g}^{-1}$ [reference: Table 2-5 in DOE Standard Guide OF Good Practices for Occupational radiological Protection in Uranium Facilities, DOE-STD-1136-2009, July 2009].

$$(0.7 - 0.4)/0.7 = 0.3/0.7 = 0.42 \approx 40 \%$$

I further challenge someone to prove there are no other transuranic radio elements in the DU alloy, such as neptunium, plutonium, or for that matter even other isotopes of uranium... consideration of alternate expression of risk should be discussed and included...

Response 61 to Comment O-3:

The Army does not dispute the challenge. It is well known that DU produced from recycled uranium (that is, uranium that has been in a nuclear reactor) contains americium, neptunium, plutonium, and technetium isotopes and ²³⁶U. [See, for example, http://www.gulflink.osd.mil/faq/faq_du.jsp.]

If these impurities are present, they are present only at concentrations on the order of parts per billion. As they are chemically similar to uranium, they have no measurable impact on the chemical toxicity of DU, especially at such low concentrations. In addition, they increase the specific radioactivity of DU on the order of parts per million. So, again, they have no measurable impact on the doses that DU may produce, especially considering that uncertainties in basic radioactivity measurements are on the order of parts per ten.

These contaminants, if they are present, are inconsequential, so it does not matter whether or not they are present in the legacy DU in Hawaii. The Army has no plans to analyze any DU for these contaminants.

Standard “expression of risk” was used. The commenter must be more specific about what alternate “expressions of risk” might be needed.

I am truly unimpressed at the care in some sample monitoring at Schofield...when the wind was too strong to collect the filters for aerosol determination, some brushings from the soil were used instead for analysis...

Response 62 to Comment O-3:

If the air sampling filters were unusable for some reason, “soil brushings” are not a substitute.

[the BHHRA]ignores U.S. Environmental Protection Agency’s pronouncement that any exposure to ionizing radiation linearly increases risk.

Response 63 to Comment O-3:

It is well known that the risks of low-level radiation doses (that is, doses less than about 10 rem per year) are not quantifiable due to large uncertainties in low-dose data. Regulatory agencies around the world extrapolate data from much greater doses to low-level doses for convenience and simplicity and use the extrapolation for regulatory purposes. This extrapolation is called the “linear-no threshold (LNT) hypothesis”; it has neither been proven nor disproven. The BHHRA does not ignore the LNT. The Resrad code incorporates the LNT through its reliance on EPA tables in Federal Guidance Report No. 13, “Cancer Risk Coefficients for Environmental Exposure to Radionuclides: Updates and Supplements.”

It ignores the emerging science that DU and its alloys or oxides in lesser quantities than natural uranium may indeed elevate risk from exposure. It ignores the fact that 40-plus years of bombing may have created aerosols capable of rebound or resuspension and be transported many miles anytime there is renewed disturbance of the surface.” [9-4-10 Commentary by Michael Reimer in *West Hawai’i Today*]

Response 64 to Comment O-3:

We were not able to identify the emerging science that DU and its alloys or oxides in lesser quantities than natural uranium may indeed elevate risk from exposure. The Army used standard monitoring techniques. The Army has no reason to believe the conjecture involving aerosols is true.

“The Cabrera report of the Schofield burn states they use the yellow color of the soil to show the presence of DU...there was no definition of yellow or how extensive it was...” [9-4-10 e-mail from Mike Reimer to Cory Harden]

Response 65 to Comment O-3:

Yellowcake contamination was clearly visible, but was not quantified.

“I met Jim Morrow about 2 years ago to specifically talk about DU...He is of course restricted in what he can do because of his Army Contract [to do air testing]...He felt frustrated that the Army would not analyze one of the DU fragments to see if it contained transuranics and what the DU ratios were.” [9-3-10 e-mail from Mike Reimer to Cory Harden]

“...they do add a section of chemical exposure, also minimized by ignoring the form of Uranium as an oxide...[Morrow] is measuring total uranium, not DU...It may be the alloy that is the hazard as the newer alloys with titanium have shown to be highly toxic...One thing that really riles me when someone says DU has 40 percent less radioactivity that [sic] natural U...” [9-1-10 e-mail from Mike Reimer to Cory Harden]

Response 66 to Comment O-3:

The legacy DU is either intact in the rounds and hence is not available for human uptake or in the form of corrosion products, specifically uranium oxide. If one assumes that any detected uranium is depleted uranium, the detected uranium is still well below Federal standards for uranium in the environment. The Davy Crockett alloy is 92 percent depleted uranium and 8 percent molybdenum. It does not contain titanium. Molybdenum is, of course, not radioactive. Human toxicity data for molybdenum is lacking. However, experience with workers exposed to molybdenum compounds indicates that molybdenum does not have long term chronic toxic effects. See, for example, “Molybdenum in Human Health” (http://www.imoa.info/HSE/environmental_data/human_health/molybdenum_toxicity.php) The DU is in fact 40% less radioactive.

Re. Final Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys, Cabrera Services, 7-24-09

“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!

Response 67 to Comment O-3:

Table 2-1 of “Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys, The Big Island (Hawaii), Hawaii” clearly shows that the results of sampling soil for uranium are consistent with natural uranium and are inconsistent with DU. Data from that table appear in the table at the end of this document with a column added that shows the $^{238}\text{U}/^{234}\text{U}$ ratio. Generally, the Nuclear Regulatory Commission considers a value for this ratio that is greater than 3 to be indicative of the presence of DU in a uranium sample. As the commenter stated, “pure” DU has a $^{238}\text{U}/^{234}\text{U}$ ratio of about 5.5 and natural uranium (in secular equilibrium) has a $^{238}\text{U}/^{234}\text{U}$ ratio near 1.

We concur that “significant” is a subjective term. An objective term is “confidence interval.” The uncertainties in the table below show 95 percent confidence intervals (about two standard deviations). Every sample demonstrates a $^{238}\text{U}/^{234}\text{U}$ ratio that includes 1 (or a number less than 1 if statistics are poor) within the 95 percent confidence interval. None of the samples demonstrates a $^{238}\text{U}/^{234}\text{U}$ ratio that includes 3 within the 95 percent confidence interval. In fact, none of the samples demonstrates a $^{238}\text{U}/^{234}\text{U}$ ratio that includes 3 within the 99.99 percent confidence interval (about four standard deviations).

The conclusion in “Technical Memorandum for Pohakuloa Training Area (PTA) Aerial Surveys, The Big Island (Hawaii), Hawaii” is correct. The data and calculated $^{238}\text{U}/^{234}\text{U}$ ratios support none of the commenter’s conclusions.

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.

Response 68 to Comment O-3:

We believe the quote refers to a 2007 survey. The photographs were taken during the present survey.

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 spotting 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.” [10-27-09 e-mail from Mike Reimer to Cory Harden]

Response 69 to Comment O-3:

The Army does not contend that “...because there is so little DU found at PTA, it has already been removed.” The report makes no such statement. Instead, it states “...some type of range clearance may [emphasis added] have occurred at PTA.” It may also be that most DU was used at Schofield Barracks.

3.12.3.2 Army/NRC License

“...the Army does not close operational ranges for cleanup, but...determine[s] whether there is a substantial threat of release of munitions constituents from an operational range.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-130 to 131*]

See comments on 3.4.7.

“The Army has applied to the NRC for a source material license to possess Davy Crockett M101 spotting round DU on ranges at PTA. Once issued, this license would not permit "clean-up" of this DU, only possession. If and when the Army decides to "clean- up" this DU, the Army would apply to the NRC for an amendment to the license to allow for this activity (personal communication with the IMCOM

Radiation Health Safety Officer, February 2011).” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-133*]

The EIS should include the information that the Army asked the Nuclear Regulatory Commission to approve a Radiation Safety Plan for Hawai‘i before the license is issued so they can continue actions in DU areas. The Army says suspending actions during the lengthy licensing process would create “possible significant adverse impact on Army readiness, national defense, and security.” [e-mail from Bob Cherry, Army Radiation Safety Officer, to Nick Orlando, Nuclear Regulatory Commission, 8-31-11, <http://wba.nrc.gov:8080/ves/ML1124908>]

Response 70 to Comment O-3:

The EIS and the responses in this section now have information about the NRC process.

3.14 PUBLIC SERVICES AND UTILITIES

3.14.1 Introduction and Region of Influence

3.14.1.2 Utilities

Solid Waste Management

“In 2010, average waste generated was estimated at 3 tons per day, or approximately 1,100 tons per year (DOE, 2010). This is more than a threefold increase over a 2002 study...PTA has been nominated by the Army as a test site for a waste to energy demonstration project... The landfill on the island is nearing capacity, but there are plans in place to open new cells to create additional capacity in the future.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 3-145*]

Why the increase?

Response 71 to Comment O-3:

The increase in waste can be attributed to the increased training events for our Soldiers at PTA in support of our Troops engagements in Iraq and Afghanistan. It is hard to compare annual rates of solid waste generation without taking into account the number of Soldiers being trained.

What is percentage of Hawai'i Island waste comes from Pohakuloa?

Response 72 to Comment O-3:

PTA generates an estimated 1,100 tons of industrial solid waste annually as reported in the DOE Final Targeting Net Zero Energy at PTA (2010).

What does the Army pay the County to handle waste?

Response 73 to Comment O-3 :

In Section 3.14.2.2 Utilities, the EIS reports that the 2010 annual waste disposal costs for the base were estimated at approximately \$166,250.

3.15 WILDFIRES**3.15.1.1 Fire Prevention****Ignition Control****Fire Danger Rating System**

“A FDRS [Fire Danger Rating System] designed specifically for PTA was developed by the USFWS [U.S. Fish and Wildlife Service] and CSU [Colorado State University] based on analysis of PTA’s fire history, fuels, fire behavior models, and weather/climatology.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhākuloa Training Area (PTA), Hawai‘i, p. 3-153]

When was the FDRS done? Is it revised often enough to accommodate climate change and other factors?

Response 74 to Comment O-3:

The initial plan was developed between 2001 and 2002. The Army is in the process of revising its Wildfire Management Plan and are taking into consideration past experience. Additionally, wildfire mitigation measures have been provided in the 2013 BO.

3.15.3 PTA Range Area**3.15.3.1 General Range Area****Fire Fighting Infrastructure**

Figure 3.15-1. Fire Management Facilities *[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhākuloa Training Area (PTA), Hawai‘i, p. 3-157]*

Why are there few fire dip tanks outside the north portion of PTA?

Response 75 to Comment O-3:

The Army protects two areas located near state and federal Palilla habitats. The Army does have dip tanks adjacent to those areas. However, the area north of Saddle Road is not part of our area of responsibility. PTA has three 80,000 gallon dip tanks on the KMA parcel. The Army cannot answer why there are not dip tanks in other areas.

How did water supplies hold up during fire tornado in 2010?

Response 76 to Comment O-3:

The referenced fire was located half on state lands and half on Army lands. The Army had no issues with water supply. The Army has internal assets for 5,000-gallon tankers within PTA. If PTA had a protracted fire that lasted four-to-five days of active spread and burn, this could become problematic. However, the state park and PTA have water tanks (predominately filled). If water needs to be trucked in, the Army trucks in the necessary water. For any fire that the Army has encountered to date, including the fire up by Waikiki Ranch (between KMA and Waikiki Ranch), the Army did not have any issues delivering water out to combat those fires.

“As of June 2006, approximately 27 km (17 mi) of access roads exist in the northwest portion of PTA with an additional 24 km (15 mi) requiring construction...Firebreaks/fuelbreaks at PTA are currently in the planning and development stage...Several firebreaks/fuelbreaks are planned for construction in the near future.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuoloa Training Area (PTA), Hawai‘i, p. 3-158]

When will work be completed on the 15 miles of fire access roads in need of improvement?

The DEIS should have included more specifics on firebreaks and fuelbreaks for public comment.

Response 77 to Comment O-3:

The Army has funding to improve the fire break road. The Army has an 8-12 man crew providing daily maintenance to the over 20 miles of fire breaks at PTA.

Section 3.15 has been revised to include more specifics on firebreaks and fuelbreaks.

Figure 3.15-2. Fire Access Road System for KMA [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuoloa Training Area (PTA), Hawai‘i, p. 3-158]

It appears two-thirds of the roads need improvement, contrary to text on p. 158. When will this be done?

Response 78 to Comment O-3:

Improvements to the fire access road system is a continuous dynamic process that will further improve as necessary. The Army is improving roads constantly and has identified the road that would provide access to the IPBC as a priority for maintenance.

4.3 VISUAL RESOURCES

The quality of visual resources appears to be significantly underestimated.

Response 79 to Comment O-3:

In order to assess the quality of visual resources for the Proposed Action, the overall visual character and distinct visual features on or in the viewshed at PTA, as well as any sensitive viewpoints within these viewsheds was analyzed. The analysis of visual resources examines the impacts on visual resources from both the installation and at a distance from the installation. In general, features beyond 1 mile (1.6 km) are so distant that only forms and outlines are discernable, and visual impacts are negligible. Visual resources also include places of cultural importance or Traditional Cultural Properties (TCP) (defined in Section 3.10.1 Cultural Resources). PTA is within the planning area of the County of Hawai‘i General Plan (County of Hawai‘i, 2005). Although the county does not have jurisdiction over the use of federal lands, the Army considers the guidance contained in the general plans in its decisions, to the greatest extent practicable, in order to avoid or minimize conflicts with surrounding nonfederal lands. The county general plans provide policies and objectives with respect to scenic resources. The two alternative locations for the proposed IPBC are located within the impact area at PTA. The Proposed Action would not conflict with the county general plan; visual resources would not be significantly impacted because the impact area is not identified as an area of high scenic quality and is not readily accessible to, or used

by, large numbers of people. Please refer to Sections 3.3 and 4.3 for further discussion of the analysis of visual resources for the proposed IPBC.

4.4 AIR QUALITY

See comments on 3.4.

Response 80 to Comment O-3:

As identified in Section 4.4.3.1, potential impacts to air quality from construction activities and training will be managed through development of a Dust and Soils Mitigation Monitoring Plan. The plan would address mitigation measures such as, but not limited to, restrictions on the timing or type of training during high-risk conditions, dust monitoring and control measures, vegetation and soil monitoring, use of periodic application of water or dust control palliative products, use of washed gravel on military vehicle trails, and buffer zones to minimize dust emissions.

4.5 NOISE

Impacts from concussion should be evaluated. A friend told me he was riding his motorcycle on Saddle Road when a sudden concussion from a big gun made it difficult to stay upright. He said if he'd been less experienced, he would have crashed.

All noise impacts seem to be underestimated. See comments on 3.1.1 and 3.5.

Response 81 to Comment O-3:

Please see Response 1 to Comment F-2.

“...the Proposed Action would not increase the average number of aircraft and training/firing operations beyond historic levels experienced at PTA. An assessment of ambient noise levels versus noise events beyond Zone II noise contours would require additional noise modeling as well as on-site noise measurements, which is beyond the scope of this study.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-27]

Impacts from intermittent loud noise, not just averages, should be evaluated.

Lay-person language should be used.

Response 82 to Comment O-3:

Intermittent noise events are captured in the noise analysis (see Appendix F). Small caliber arms are measured using the PK15 (met) metric for which the noise contour is the loudest level that occurs, regardless of the number of shots. In contrast, large arms are measured using CDNL, a 24-hour average metric which reflects the number of shots fired over that period. The glossary contained in Appendix F explains noise measurement terms for those measurements used in the EIS. This should assist readers in understanding the metrics used for noise measurement.

4.5.4.2 IPBA at Western Range Area (Preferred Alternative)

“Some helicopter maneuvers may occur specifically at LZs within the IPBC, and also to conduct live-fire training at hardened targetry on the IPBC.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-28]

How is targetry hardened?

Response 83 to Comment O-3:

Targets are being hardened for aviation targetry. A 'hardened target' is a deeper and higher level of berm of earth. The PEIS did not go into details about specifications since this range is still under design. Safety standards include standoff distances and altitude/attitude of aircraft.

4.8 GEOLOGY AND SOIL RESOURCES**4.8.4 PTA Cantonment Area****Modernization/Construction Impacts**

“Less than Significant – Exposure to soil contaminants in the Cantonment Area would represent a low risk to personnel. No live-fire or maneuver training is conducted in the Cantonment Area, and airborne pathways (such as windblown contaminated dust) is not a migration pathway that soils contaminated with munitions constituents would reach receptors outside the Range Area.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-46]

See comments on 3.4 and 3.8.

Response 84 to Comment O-3:

While on-going training actions would increase the amount of MEC/UXO generated at PTA, this activity would be firing into the existing impact area which is a restricted access area, thereby resulting in less than significant impacts to human health and safety. The lack of surface or groundwater greatly reduces the probability of contaminant migration in both the Cantonment Area and General Range Area. The conclusions of an ORAP assessment of PTA conducted in 2010 (discussed in detail in Section 3.8) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the range areas and within the impact area at PTA. In addition, studies also have shown that the DU fragment size and the environmental conditions at the ranges in Hawai‘i serve to prevent migration, including by air.

4.8.5 PTA Range Area**4.8.5.1 General Range Area****Modernization/Construction Impacts**

“In general, the risk due to exposure to contaminated soils at PTA would be low. Even though the construction of proposed or new ranges and facilities would require the conversion of a portion of the range impact area, Soldiers would be exposed to contaminated soils in a limited capacity for a period of days or weeks. The level of chemical compounds present would be below their respective industrial PRGs. Considered together, the potential duration of exposure to the chemical concentrations on the training ranges at PTA would represent a low risk to personnel.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-47]

What are total combined risks to soldiers from contaminants at all sites where they train?

Response 85 to Comment O-3:

Overall, the sum of the carcinogenic and non-carcinogenic risks, based on the available soil sampling data is less than the USEPA threshold for worker exposure. It is unlikely that exposures to possible chemicals in the soils by Soldiers on the ranges would be similar to worker exposures in an industrial world as USEPA analyzed for effects to chemicals. When assessing the potential health effects from working with a particular material it is necessary to understand the difference between "toxicity" and "hazard". Toxicity is the ability of a substance to produce an unwanted effect when the chemical has reached a sufficient concentration at a certain site in the body (e.g., liver). Hazard is the probability that

this concentration in the body will occur. The main constituent discussed within the document is RDX. Per the Agency for Toxic Substances and Disease Registry (ATSDR), RDX does not build up in fish or people and there are no known effects from short-term low-level exposure. Additional, no public contact with these soils will occur.

4.9 BIOLOGICAL RESOURCES

4.9.4 PTA Cantonment Area

Modernization/Construction Impacts

“Wildlife and migratory birds would be temporarily disturbed during construction; however, species likely to be present in areas of cantonment construction are those habituated to human presence, and would not be adversely affected.” *[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-54]*

Cite background information for this statement.

Response 86 to Comment O-3:

There are no protected species present within the Cantonment Area at PTA. It is self-evident that wildlife have habituated in the area due to the constant use of the Cantonment Area over the course of the past 60 years.

4.9.5.1 General Range Area

Modernization/Construction Impacts

Less Than Significant

“Increased noise as a result of construction would not be expected to impact terrestrial wildlife because field surveys have shown that it is not a significant factor in behavior and does not affect reproductive success (U.S. Army and USACE, 2008b).”

[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-57]

The field surveys should be available in the appendix for public review.

Response 87 to Comment O-3:

Please see Response 1 to Comment F-1. Potential noise impacts on wildlife at PTA are discussed in the 2013 BO, which is included in Appendix G.

Live-fire Training Impacts

Significant Impact Mitigable to Less than Significant

“The use of new ranges at PTA would not likely significantly impact wildlife or their habitats because the ranges would be constructed in previously disturbed areas. Wildlife species in or around these ranges are more tolerant of human activity, and it is assumed that listed species would have previously left the area.” *[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-57]*

Cite background information for this statement.

Response 88 to Comment O-3:

The proposed modernization projects include upgrades to existing ranges and potential construction of new ranges in established training areas. It is reasonable to state that wildlife have utilized these areas for many years and will continue to do so.

Maneuver Training Impacts**May Affect / Likely to Adversely Affect**

“Maneuver training impacts within the Western Range Area could result in the potential disturbance of federally listed species and their habitat...A Section 7 formal consultation is pending with the USFWS to address potential impacts to listed species, as well as conservation and mitigation measures to reduce impacts.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i*, p. 4-59 to 60]

Consultation results and conservation and mitigation measures should have been available for public review in the EIS.

Response 89 to Comment O-3:

Please see Response 1 to Comment F-1. While the preferred course of action is for the Army to have completed or be close to completing needed consultation, these are separate obligations that do not always proceed in an ideal manner. That being the case, the Army still believes that there was enough information provided during the public comment period such that the public had a meaningful opportunity to comment.

4.10 CULTURAL RESOURCES**4.10.4 PTA Range Area****4.10.4.1 General Range Area****Modernization/Construction Impacts****Significant Impact**

“The construction of the proposed projects would have a significant impact on cultural resources based on the known number and range of resources within the PTA Range Area.” [Draft PEIS, *Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i*, p. 4-65]

The extensive impacts to the rich cultural resources of the Mauna Kea—Mauna Loa—Pohakuloa area are unacceptable.

Response 90 to Comment O-3:

The Army takes our responsibilities toward the cultural patrimony of PTA very seriously and we endeavor to locate and preserve as many cultural resources as possible. The Army undertook Section 106 consultation and consulted with stakeholders in the development of a PA, which is discussed in Sections 3.10 and 4.10 of the Final EIS and included in Appendix D.

4.10.4.2 IPBA at Western Range Area**Modernization/Construction Impacts****Significant Impact**

“Irreversible damage and loss to the lava tube system and excavated pits (any traditional importance associated with these features) could not be avoided...Given the number of pits found throughout the range it would be impossible to avoid loss of some of these features. Because of cultural material found in

some lava tubes, and because excavated pits may have served a traditional purpose or served as a means for subsistence, irreversible impacts would occur to archaeological sites in the proposed IPBA footprint. Construction of the IPBA would involve ground softening, grading site surfaces, excavating the subsurface, and moving heavy construction equipment. All of these activities may result in direct destruction of or damage to archaeological resources. The mitigation measures given below could minimize the severity of the impacts.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-66 to 67]

See comment on 4.10.4.1.

Response 91 to Comment O-3:

The Army is in compliance with Section 106 of the NHPA and NAGPRA. The Army takes our responsibilities toward the cultural patrimony of PTA very seriously and we endeavor to locate and preserve as many cultural resources as possible.

4.11 HAZARDOUS MATERIAL/ HAZARDOUS WASTE

See comments on 3.4.

4.11.4.2 IPBA at Western Range Area

Live-fire Training Impacts

Significant Impact Mitigable to Less than Significant

Lead from Ammunition

“The addition of an IPBA on the Western Range Area would introduce lead from small arms ammunition of more than an (conservative) approximate 253,000 rounds per year by units of the 25th ID (58,000 of these being contained within the Shoothouse).” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-76]

How many rounds would be fired here by soldiers not in this unit?

Response 92 to Comment O-3:

Training density and ammunition will not exceed STRAC allocations. Training iterations to PTA will be based on training strategy, evolving doctrine, and operational needs. The Final EIS has been updated with more detailed information and analysis. Please refer to Chapter 2 of the Final EIS for annual expenditure of munitions on the IPBC, by weapon system and by unit echelon.

4.12 DEPLETED URANIUM

See comments on 3.4 and 3.12.

4.15.5.2 IPBA at Western Range Area

Live-fire Training Impacts

Significant Impact Mitigable to Less Than Significant

“It is assumed that the majority of wildlife species would have temporarily leave the area during periods of loud noise and disturbance, but may return.” [Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p. 4-95]

The DEIS should evaluate impacts to endangered species repeatedly forced out of their habitat. See comments on 4.9.

Response 93 to Comment O-3:

Wildlife is expected to habituate near human presence and training activities or to temporarily / permanently evacuate the area. This expectation is consistent with human activity and wildlife in developed areas in general. Please see Response 1 to Comment F-1.

4.15 WILDFIRES

See comments on 3.4.

4.15.5 PTA Range Area

[Draft PEIS, Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA), Hawai‘i, p.4-93]

What training proposed in this DEIS is the same as in past Makua training, and in the August 2008 Makua DEIS?

*“An Infantry Platoon Battle Area...could...replace past live-fire training at Makua Valley...”
[Upgrade in sight, Star-Advertiser, 1-22-11]*

“...the Army said...[it] no longer will use the heavy firepower in Makua that started multiple fires...and fueled a number of lawsuits....Just over a year ago, Lt. Gen. Benjamin R. “Randy” Mixon, head of the U.S. Army in the Pacific, said the army would shift artillery and other heavy weapons training from Makua...to...Pohakuloa...over the next five to 10 years...Mixon...said this week...live-fire training will be conducted at Schofield, Pohakuloa and on the mainland...[and] ‘The key piece...to replace the loss of live-fire capability at Makua, is the platoon and company live-fire area (at Pohakuloa)...’ ” [Army ends live-fire training at Makua, Star-Advertiser, 1-13-11]

Response 94 to Comment O-3:

The proposed IPBC at PTA is certainly similar to the combined arms live- five training area at MMR. The Army has not conducted live fire training at MMR since 2004, but a resumption of live-fire is currently the subject of a separate NEPA analysis. Because of this, the Army cannot speculate about the relationship between these projects and MMR. Nevertheless, it is important to note that transportation, in general, makes PTA a more costly place to train for O'ahu-based Soldiers and Marines, both in terms of cost and time. The PTA IPBC would not eliminate the need for live -fire training on O'ahu.

What fire risks and fire prevention measures discussed in this DEIS are the same as in past Makua training, and in the August 2008 Makua DEIS?

“Between 1970 and 1998, 276 fires occurred at MMR, with approximately 20 fires (each burning over 100 acres...causing most of the damage to natural resources...Ten of these fires escaped the firebreak during September. Nine, eight, and seven fires escaped during November, July, and March respectively.” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 3-366]

Fires at Makua consumed 800 acres thirteen years ago (burning outside firebreak roads), 2,100 acres eight years ago (when a controlled burn became uncontrolled), 300 acres six years ago, and 100 acres one month ago (during ordnance cleanup).

- *“1998 Army suspends training after several fires burn outside firebreak roads [at Makua]...a Marine Corps mortar caused an 800-acre fire...” [Army ends live-fire training at Makua, Star-Advertiser, 1-13-11]*
- *“2003 A fire intentionally set by the Army to manage grasses gets out of control and burns half the valley...” [Army ends live-fire training at Makua, Star-Advertiser, 1-13-11]*

- *“Preparation and execution of the [July 2003] prescribed burn was performed according to the burn plan prepared by the Army...The Army coordinated the prescribed burn with the USFWS; US Forest Service; HDOH; Clean Air Branch; State DLNR, Division of Forestry and Wildlife; Federal Fire Department; Honolulu Fire Department; Hickam Fire Department; and the National Weather Service...the fire burned uncontrolled for three days and burned 2,100 acres...all of the precautionary steps...as outlined in the prescribed burn plan, were carried out...” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 3-368]*
- *[2005] “Makua Valley activists are disputing claims by the Army that none of the 41 cultural or historical sites in the Leeward Oahu military training area was damaged by last week's brush fire...the Army said it has yet to pinpoint the cause of the fire...” [Group says Makua fire damaged cultural sites, Honolulu Star-Bulletin,8-29-05]*
- *[2011] “A fire burned about 100 acres of the Army's Makua Valley training range...after it was started by workers who had detonated unexploded ordnance.” [Army says Makua wildfire started during ordnance cleanup, Star-Advertiser, 9-28-11]*

“...tracers...accounted for 49 percent of historical wildfire ignition sources. Live-fire training would occur during the daytime and nighttime, and it is more difficult to extinguish a fire at night at MMR...missile or rocket propellant or illumination munitions may not be fully consumed before reaching the ground, creating the potential for igniting a wildfire...[the proposed action] would increase the amount and intensity of use of...weapons that have the potential for igniting a wildfire...Because the 2.75-caliber rocket is fired from a helicopter rather than from a fixed position, this weapon has an increased risk of misfiring...Anticipated impacts [at PTA] would be similar to those [at Makua--“Significant and unmitigable wildfire impacts” ES-34]

[Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p ES-33 to 35]

“The most common cause of wildfires on MMR has historically been the use of tracer ammunition...percentages of historical fires at MMR by source...:

- *Tracer ammunition, 49 percent;*
- *Anti-tank missiles...12 percent;*
- *Demolition explosives and mines, 6 percent...*
- *...unknown or unrecorded, 6 to 12 percent. White phosphorus...could be the source...it can be buried and then could be ignited if uncovered; and*

Other ignition sources totaling 16 to 22 percent...These sources include UXO detonation, indirect fire (including mortars and artillery), rockets, fire restart/escape, muzzle flash, and pyrotechnics....” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 3-366 to 368]

Response 95 to Comment O-3:

These are two different actions and installations which have their own Integrated Wildfire Management Plans, biological Implementation Plans, and SOPs based upon resources available at each installation. The plans were designed with cooperating agencies such as the US Fish and Wildlife Service and not strictly to just Army personnel. Due to the nature of the activities on PTA, wildfires will probably still occur but these plans have been designed to minimize the impacts to resources at the installations and surrounding area.

Makua fire management plans were written, but not fully used. What would prevent this occurring at Pohakuloa?

“...the IWFMP [Integrated Wildfire Management Plan] has been relied on only to a limited extent in the past to manage wildfire ignition, and this did not include training scenarios with the use of tracers...” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p ES-34]

Response 96 to Comment O-3:

The PTA Integrated Wildland Fire Management Plan (IWFMP) will be followed. The Army has learned from the lessons of events that have happened at MMR.

Is there a fire manager at Pohakuloa, or plans for one?

“According to the Analysis of fire Management concerns at Makua Military Reservation, one of the most frequently cited reasons for the decrease in fire prevention and suppression success in the 1990s has been the lack of a well-trained, devoted fire manager on-site at MMR, who could be relied on to implement the IWFMP.” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 4-234]

Response 97 to Comment O-3:

Yes there is a fire manager at PTA. The Army has made a commitment to protect our area and has a good track record at PTA.

How secure is funding for fire prevention?

“Critical must-fund projects or contracts (such as firebreak construction or dip pond/tank construction)...compete with other critical must-fund projects based on priority and available funds for that year, and are subject to the approval of the Garrison Commander...” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 3-368]

Response 98 to Comment O-3:

The Army dedicated \$4 million dollars this year for fire break construction and maintenance.

How are fire history files kept now?

“Most fire history files for MMR and PTA are incomplete and were primarily retained as manual records, which were destroyed after five years, following disposition of records, in accordance with the Modern Army Recordkeeping System...As a result, limited historical wildfire records are still available and complete to compare wildfire incidences from previous training to proposed training.” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 4-231]

Response 99 to Comment O-3:

Files are kept in hard copy format and a fire report is prepared for any fire that occurs at PTA started on Army assets. Fire history records are kept for seven years, and some even further. These files are currently being digitized.

Is this still correct?

“...the western and the northern sections of PTA potentially face the greatest threat of wildfire.” [Draft EIS for Military Training Activities at Makua Military Reservation, 8-08, p. 3-368]

Response 100 to Comment O-3:

PTA's principle threat of wildfire is from the west. There is a potential for a start from the north, but the new Saddle Road alignment along the north corridor has reduced this risk. To prevent fires coming from the west into PTA, several fire and fuel breaks have been developed.

ATTACHMENT

Curriculum Vita

G. Michael Reimer, Ph.D., Geologist

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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 Hawai'i 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.

Comment O-4: David Henken, EARTHJUSTICE, 223 South King Street, Suite 203, Honolulu, HI 96813

To Whom It May Concern:

We submit these comments in response to the Department of the Army's request for comments regarding the Draft Programmatic Environmental Impact Statement (PEIS) for Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area (IPBA) at Pōhakuloa Training Area (PTA) on Hawai'i Island. In reviewing the draft PEIS, we focused on the proposal to construct an IPBA, which would include an infantry Platoon Battle Course (IPBC).

Failure to Discuss Relationship of Proposed IPBA to Training at Mākua Military Reservation

The draft PEIS fails to disclose the relationship between the proposal to construct an IPBA at PTA and live-fire training at Mākua Military Reservations (MMR) on O'ahu. See 40 C.F.R. §§1502.1 (EIS "shall provide full and fair discussion of significant environmental impacts"), 1502.16 (EIS "must disclose" [i]ndirect effects and their significance"). In the final EIS for Military Training Activities at MMR (June 2009), the Army identified the construction and operation of an IPBC at PTA as a reasonable and feasible alternative to resuming live-fire exercises at MMR. See MMR EIS at 2-13 to -20, 2-61, 2-64 to -67. The Army now proposes just such a facility at PTA, raising the prospect of eliminating future live-fire training at MMR. See ("a new Infantry Platoon Battle Area at PTA that could permanently replace Mākua Valley might be ready for use in 2014 or 2015, the Army said")(enclosed). If this is the case, the PEIS should identify the elimination of the live-fire at MMR – which the Army has acknowledged threatens significant harm to cultural and biological resources – as a beneficial effect for the proposed IPBA at PTA. See 40 C.F.R. §§ 1508.08, 1508.27(b).⁶

Response 1 to Comment O-4:

The Final EIS has been revised to discuss better the relationship between the proposed IPBC and live-fire training at MMR. Chapter 2 of the 2011 Draft PEIS made clear that "[n]o additional Army units would travel to PTA to use the IPBA; rather, battalions of the 25th ID would deploy to PTA to conduct their FSO METL training twice per year and would schedule use of the IPBA...." (p. 2-17). The Draft EIS also stated that the "improvements at PTA . . . do not eliminate the need for live-fire ranges on O'ahu." (p. 2-44). The Final EIS (in Section 1.5.1.1) elaborates on this by making clear that the IPBC can meet some but not all live-fire needs of the Soldiers of the 25th Infantry Division stationed at O'ahu. It will remain very expensive and time consuming to send units to PTA. Soldiers living on O'ahu will have live-fire training requirements that will have to be met on O'ahu. The part of the article mentioned by the commenter that says "a new Infantry Platoon Battle Area at PTA that could permanently replace Mākua

⁶ ¹Alternatively, if constructing the proposed IPBA would preclude constructing a replacement facility for MMR, the PEIS must disclose that adverse, indirect effect. Id.

Valley” is inaccurate. Nevertheless it is fair to say that some of the Division’s live fire training requirements could be met through use of the PTA IPBA.

It is very speculative to say at this time whether the Division’s live-fire training needs can be met without using MMR. For various reasons, live-fire training has not occurred at MMR since 2004. Because of this, the Army has had to make adjustments to required training. Many of the Soldiers who would normally train on O’ahu have been deployed overseas. If the Army ceases using MMR, it will be for reasons in addition to the availability of new ranges at PTA. The Army has completed an EIS for the resumption of live fire at MMR and is now conducting some additional studies of the affected environment there. The Army commander quoted in the article also said “I want to wait until the (deployed) [S]oldiers get back, and I want to see how far we are with Schofield, and I want to see how far we are with PTA.” In other words, it is not clear yet that all live-fire at MMR will be eliminated, and if it is, it will be for a number of complex reasons.

Whether there would be a beneficial impact at MMR of the building of the PTA IPBC is hard to say, for the reasons described above. Even if the need training at MMR is not eliminated because of the IPBC, it is fair to say that the IPBC will fulfill some of the live-fire requirements that might otherwise be conducted at MMR. This potential for reduced use at MMR could reduce some of the possible impacts identified in the 2009 MMR EIS. This beneficial impact is now discussed in a separate section in chapter 5 of this EIS.

Inadequate Analysis of Alternate Locations

The discussion of alternate locations for the PTA IPBA is “the heart of the environmental impact statement.” *Īlio’ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095 99th Cir. 2006). The draft PEIS falls far short of satisfying the National Environmental Policy Act’s (NEPA’s) requirements for this crucial analysis, failing to “present the environmental impacts of the proposal and the alternatives” in a manner that “sharply defin[es] the issues and provid[es] a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14. This is largely due to the lack of biological, cultural or hazardous material surveys of the Southwest of Range 20 alternative or of the substantial portions of the Charlie’s Circle alternative that do not overlap with the preferred Western Range Area location. See Draft PEIS at ES-9, 1-38, 3-115, 3-125. The Army also did not perform noise modeling for either nonpreferred alternative. *Id.* at 4-32. Having failed to gather the necessary information, the Army has no basis to make valid comparisons of potential impacts to biological and cultural resources, as well as impacts due to unexploded ordnance (UXO) and noise, to determine whether any of the alternate locations for the IPBA “would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1; see, e.g., Draft PEIS at ES-9 (whether listed plants are present at Southwest of Range 20 alternative is “unsubstantiated to date”), 4-32 (“Noise impacts at the IPBA at Charlie’s Circle cannot be determined because noise modeling was not performed”).

The draft PEIS concludes that constructing and operating the IPBA at the Western Range Area would cause significant impacts to biological and cultural resources, but would have less than significant noise impacts and UXO-related impacts that are mitigable to less than significant. Draft PEIS at 4-25, 4-53, 4-63, 4-71. In order to make “a reasoned choice among alternatives,” the Army was obliged to develop the necessary information about the significance (or lack thereof) of these same impacts at the two alternate locations. 40 C.F.R. § 1502.22(a); see, e.g., Draft PEIS at 4-78 (noting “anticipated higher probability that MEC/UXO may be encountered at [Southwest of Range 20] location”). The Army cannot credibly claim that the costs of obtaining that information would be “exorbitant,” 40 C.F.R. § 1502.22(a), since the draft PEIS repeatedly states that the missing surveys and analyses would be performed “if the Army were to change the Preferred Alternative” to either Charlie’s Circle or Southwest of Range 20. Draft PEIS at 4-32 (noise); see also *id.* at 2-39 (“If the Army selects the Charlie’s Circle alternative it would conduct supplemental [biological and cultural resources] surveys”), 2-40 (“If the Army selects [Southwest of Range 20] alternative it would conduct the necessary surveys ... to assess impacts to

biological and cultural resources at that area”), 4-78 (if Southwest of Range 20 alternative selected, UXO surveys could be performed).

The Army’s approach of selecting an alternative before thoroughly evaluating impacts puts the cart before the horse. Without accurate and complete information regarding the comparative environmental costs and benefits of the different possible locations for the IPBA, the Army has no reason to switch from the preferred Western Range Area location to either alternative. *Cf. Pit River Tribe v. United States Forest Service*, 469 F.3d 768, 785 (9th Cir. 2006) (“The consideration of alternatives requirement ... guarantee[s] that agency decisionmakers have before them and take into proper account all possible approaches to a particular project ... which would alter the environmental impact and the cost-benefit balance”) (quoting *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th cir. 1988)). The Army’s failure to obtain vital information about potential impacts associated with the two non-preferred alternatives violates NEPA’s prohibition on “uninformed...agency action.” *Robert v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989).

Response 2 to Comment O-4:

There is no question that the Army has identified the Western Range Area as its preferred alternative (See Section 2.7.2.1 in the Final EIS). But a final decision on the IPBC location has not been made. The ROD for this EIS will decide the location, and could include a “no action” alternative under which the IPBC would not be built.

In the 2011 Draft PEIS, the Army considered the site located Southwest of Range 20 as a viable alternative to be carried forward for full evaluation; however, subsequent reconnaissance resulted in the elimination of the site as an alternative. See Section 2.5.4.1. of the Final EIS. The Final EIS reflects additional information about the two alternative IPBC locations, particularly in the topic of biological and cultural resources. The Army’s focus on the preferred alternative should not distract readers from the fact that the Army has examined both remaining reasonable alternatives for the IPBC in considerable detail. None of the focus on the Western Range Area Alternative represents an irretrievable commitment of resources to that alternative. It is also important to remember that much of the surveying was necessary to support consultation on cultural and natural resources. This consultation is normally done for the preferred alternative. Again, it does not mean that a decision in favor of the preferred alternative has already been made. It is simply the one that is preferred at this stage of the process. Both remaining action alternatives have had full surveys of cultural and biological resources, the results of which are reflected in the Final EIS.

3.5 INDIVIDUALS / GENERAL COMMENTS

Comment I-1: Ms. Jane Taylor

I live in Waimea, on the wet side. Periodically, I hear the bombing and even feel the vibrations. I am a long way away. If you expand, will this get worse? I am personally concerned about noise. Also the whole depleted uranium thing was pretty unnerving. What else are you spilling into our environment that you don't even know about?

Response 1 to Comment I-1:

Please see Response 1 to Comment F-2 concerning results of the Army’s noise modeling and Appendix F. Depleted uranium is discussed in the Final EIS in Sections 3.12 and 4.12.

However, larger concerns are pollution, degradation of irreplaceable and unique dry land forest, the invasion of alien species on your equipment, and the general undoing of an absolutely special and unique place. Are there no other less small, fragile, and unique ecosystems where you could do this?

Perhaps on the mainland, closer to your military bases which would save transport?

Response 2 to Comment I-2:

The Army takes stewardship of its natural resources seriously. Sections 3.9 and 4.9 of the Final EIS discuss the Army's natural resources plans including those developed for PTA: USAG-HI Pōhakuloa INRMP for 2010-2014; Pōhakuloa Implementation Plan (PIP) (2010a); Pōhakuloa Ecosystem Management Plan (1998); and Pōhakuloa Endangered Species Management Plan (1997). Additionally, the Army complies with the conservation measures stipulated in the 2003, 2008, and 2013 BOs issued by USFWS.

From a cultural angle this is also an ongoing insult to an indigenous people's sacred area. There are a lot of reasons to reduce rather than increasing your footprint on our mountains. If status quo is the only other alternative, I guess I would prefer that, but I do think reduction should be considered as well.

Response:

The Army has conducted Section 106 of the NHPA and developed a PA in conjunction with the consulting parties (see Appendix D of the Final EIS). The Army takes our responsibilities toward the cultural patrimony of PTA very seriously and we endeavor to locate and preserve as many cultural resources as possible. Please see Sections 3.10 and 4.10 of the Final EIS for a discussion of PTA's cultural resources and Cultural Resources Management Program.

Comment I-2: Lee Ballard

Big surprise. No one on this island want any more live fire, GI's expanded presence, increased flights or anything that has to do with your Army or death games except the bars, hookers and contractors that will see more business.

Response 1 to Comment I-2:

This comment is beyond the scope of this EIS.

Comment I-3: Ted Hong

The purpose of this letter is to support the proposed Modernization of Training Infrastructure and Construction and Operation of an Infantry Platoon Battle Area at Pohakuloa Training Area, Hawai'i ("Modernization"). I live in Hilo, Hawaii, at the five (5) mile marker on the Puainako Extension. My wife, and two teenage children live, work and go to school in Hilo. I wholly support the Modernization proposal.

I grew up in Wahiawa, Oahu, near Schofield Barracks (Home of the 25th Infantry Division) and formerly Wheeler Air Field, during the Vietnam War. The War ended before I graduated from High School. But it left a distinct impression on me.

Living on the edge of a gulch that faced Whitmore Village, Oahu, I could see and hear the Army training. Helicopters would train at night in tight formations flying low to the gulch past and over my home. I observed artillery, live fire training against the Wahiawa side of the Waianae Mountains. In Intermediate School my friends and I used to go onto the East Range (military training range) to pick up spent shells (I think the statute of limitations of trespass has expired). We even heard the percussive sounds of artillery and gunfire at night during training session on the East Range several times during the year. I knew then that training in environments similar to combat was vital.

Training was vital because the parents of many of my friends and classmates were from the Army and Air Force families. My high school and my life were truly enriched by the diversity of the military families. We were invited onto the base to go bowling, skating, and other activities. Growing up in Wahiawa, I would see young men in and out of uniform on the bus, in our community and in our parks and schools with their children.

As the War raged on television and knowing that many of my friends' fathers were serving in Vietnam, seeing the faces of young service men in our community, I wondered would they come back? Were they being trained and prepared in order to survive? Would they return to their families? I trusted in the Army and hoped they would.

In High School, when either my friends or classmates from a military family lost their father in the War, it was painfully obvious. They would be devastated and usually not return to our school. Their absence was noticeable, their pain real and I could not even begin to fathom what that loss meant to them.

I support the Modernization because I know and it is painfully obvious that our service men and women need as realistic training as possible. They need thorough, comprehensive and realistic training. Not only to succeed in their mission and be prepared for combat, but simply to be able return to their families and children.

The Modernization is to make sure that our service men and women don't have to rely on dumb luck or chance in combat, but on training and skill. The more training they receive, the better their chances on successfully returning home.

The question now becomes why train on the Big Island instead of somewhere else? I thought that answer was equally as obvious. Hawai'i still occupies a strategic place in the Asia-Pacific region. Pohakuloa offers our service men and women opportunities to train in an area that they could be deployed from within hours. The Peoples Republic of China and the Peoples Democratic Republic of Korea are much closer to Hawai'i than Colorado. Our troops need to train in areas that offer realistic combat training close to the possible threat.

Additionally, there has been mistrust expressed by opponents of the Modernization plan. First, many of these opponents are vocal, perennial, anti-military activists who opposed the Vietnam War and view the Modernization plan as just another opportunity to take an anti-military stance, for no other reason than to oppose the military. Their opposition should be taken with a block of salt. Despite their persistent and shrill protests, they do not speak for me or the people I interact with in Hilo.

Finally, there are cultural and environmental activists that have voiced legitimate concerns. As the former District Chair for the Puna, Ka'u and Hilo District of Boy Scouts of America, resident and Regent of the University of Hawaii, I can personally attest to the military's and especially the staff at Pohakuloa Training Area's contributions and importance to our community. The Army has taken great strides in preserving cultural and environmental sites in the Pohakuloa area. The Boy Scouts were invited to PTA a few years ago and we were very impressed by the efforts being made to preserve the endangered and native flora and fauna. As Regent and parent, I greatly appreciate the outreach and partnership of PTA with local schools, especially the elementary school that my children formerly attended, Kaumana Elementary School.

What many protestors and activists refuse to acknowledge is that the Army is much more aware of the cultural and environmental importance of the Pohakuloa area. The Army has grown and evolved in their sense of stewardship and responsibility of tending the Pohakuloa area. Many activists use the alleged radiation from the Davy Crockett live fire exercises decades ago to oppose the Modernization. That was from another time and era. The commitment, responsibility and decision making within PTA and the Army concerning land use, especially in Hawaii, have changed.

The failure of activists to acknowledge the institutional growth in land use management is indicative of their insincerity and true motives, which is to oppose any and all military presence, in Hawai'i and in our country.

As a personal note, I do not appreciate gadfly's who would sacrifice our country, our freedoms, and the lives of our service men and women and their families for an ideology that has never worked in the history of mankind. The history of the United States, from the revolution to the present, provides us with

clear and unmistakable examples of what happens when our service men and women are not prepared for the battle facing them or anticipating the battle to come. The proposed Modernization is necessary simply to make sure that our service men and women can get the training needed to return home to their families.

My family and I fully support the Army's Modernization efforts and hope that others recognize and see the importance of training here on the Big Island.

Response 1 to Comment I-3:

Thank you for your comments.

Comment I-4: TJ McAniff

These are my comments on the PTA PEIS.

As a retired soldier with thirty-one years' service, including two Vietnam Infantry combat tours, I can attest to the value of realistic training in preparation for combat. This training enhances not only the combat effectiveness of soldiers, but their combat survivability as well. I was an Infantry battalion commander stationed at Schofield Barracks on Oahu during 1972 - 1973, and during that period, I brought my battalion to PTA three times, the last time before the battalion deployed to Vietnam. Those PTA training visits were the most valuable preparation my troops experienced before deploying. PTA's training and billeting facilities don't seem to have experienced any noticeable improvement since that time. We owe it to our troops to give them the absolute best in both training and cantonment facilities. Improvement of both is long overdue.

Response 1 to Comment I-4:

Thank you for your comments.

Comment I-5: Alan Medeiros

I am a Puna resident I have lived on the Bid Island for 13 years now previously from Oahu. I am 54 years old retired on disability from a back injury in 1998 on the job.

I had never been in the military, when I graduated from high school all of my friends left to go to the military, I was working at the time for a trucking company and in 1974 there was no need for soldiers or more enlisted men, I signed up for the draft if the military wanted me I would have gone with no hesitation what so ever, now at my age I wish I would have gone into service, but that was yesteryear,

Today I am writing to you in support of improving the Pohakuloa Training Facility. And I must apologize for my fellow citizens of the Hawai'i Island for they are ignorant. I say that because they are not educated in today's war in today's military needs. We must train our soldiers on new technologies not only for winning wars but to come home alive and not in a pine box. The people of Hawai'i Island want to keep Hawaii, Hawaii! But what they don't understand is Pohakuloa is a special place for a training facility it offers the diversity of climate it offers the diversity of desert training. If it weren't for the Military we would be part of Japan or some other foreign country, and people don't understand the military has got allot to do with the federal government even spending money on Hawaii, without federal monies we here in Hawai'i would still be living in caves and grass shacks, "Oh boy no thank you". Pohakuloa Training Camp needs the improvement it will better our solider and our community.

I am, Alan Medeiros...And I approve this message,

Response 1 for Comment I-5.:

Thank you for your comments.

Comment I-6: Sue Pekarsky Gary

While we understand the need to train military personnel we feel this should be done in an unpopulated region away from sacred grounds and environmentally sensitive areas. Certainly not on a populated island--every part of which is connected to the whole.

So, our concerns with the PTA on Big Island are several:

It concerns us that the flora, fauna and land itself of the PTA continue to be destroyed.

Response 1 to Comment I-6:

More than half of the installation is under some level of conservation measures based on the presence of critical habitat, threatened or endangered species, and cultural resources. PTA has been used on a continual basis since 1956 when there were no restrictions on use. However, the Army--through proper stewardship--has placed parts of the installation under various restrictions to further protect these valued resources while still being able to meet mission requirements.

It concerns us that on an earthquake prone island with an active volcano no consideration is given to the impact of the constant percussive nature of exploding armament on the ground.

Response 2 to Comment I-6:

Under the U.S. Geological Survey's (USGS) Frequently Asked Questions: Can we use a lot of explosives to cause small earthquakes in order to prevent having a large ones? The answer is no; for even huge amounts of explosives (in this case an underground nuclear bomb test) almost never cause even small earthquakes (<http://earthquake.usgs.gov/learn/faq/?faqID=89>).

It concerns us that, when tourism on Big Island is already severally impacted by the economic downturn, an increased visual, audible and vibrational military presence will deter potential tourists to this island. Because I/Sue work in a retail store at the Waikoloa Kings Shops, I often hear negative comments from visitors to our island about their unwanted exposure to the sounds, sights and feel of the military training exercises at the PTA and the convoys between the PTA and Kawaihae Harbor.

Response 3 to Comment I-6:

Thank you for your comment. The Army will continue to try to be a good neighbor and to provide notice of all major training activities. Live-fire training remains essential to training our Soldiers for possible deployment. In addition, please see Section 3.13.3 which describes defense spending in Hawai'i and its economic impact on the state's economy.

It concerns us that to be subjected to visual, auditory and visceral impacts of being in a war zone, for all intents and purposes, can only lead to even more stress for the human mind, soul or body. Life is not good when the sounds of everyday life are punctuated by the explosions at the PTA—at least 25 miles away. Life is not good when the house shakes repeatedly because of bombing or other armament explosions. Life is not good when we lie in bed at night and look out the window at explosive fireballs on the hills of the PTA. The July 2011 training maneuvers in the waters of Hawaii, specifically off the Big Island's North Kohala coast and at Kawaihae Harbor, were yet another stressful immersion into the impact of war on innocent civilians, residents here on this island in the American state of Hawaii, not enemies in distant countries.

Response 4 to Comment I-6:

Thank you for your comment. The Army will continue to try to be a good neighbor and to provide notice of all major training activities. Live-fire training remains essential to training our Soldiers for possible deployment, safeguarding national security at home and abroad. Hawai'i is a strategic center in the Pacific Theater.

It concerns us that with the improved facilities which will be capable of housing more trainees these negative impacts will be even greater.

Response 5 to Comment I-6:

The Proposed Action has been revised to the construction and operation of an IPBC Range. No housing facilities will be constructed at PTA as part of this proposed project.

It concerns us that the military acts with impunity and puts the life of the island, its core, its flora, its fauna and those poor mortals residing here within sight and sound of PTA activities at emotional, physical and financial risk with its training activities.

Thanks for your consideration of Big Island but we think we are full up here with military training and bombing.

Comment I-7: Carolyn Blankfield

While I am opposed to the wars in Iraq and Afghanistan, I feel we need to be supportive to our troops and provide them with the best training possible. Therefore, I support the improvement of PTA for this purpose.

Response 1 to Comment I-7:

Thank you for your comment.

Comment I-8: Shecky Cabulizan

USE FOR EXPANSION – Housing? Weapons? Would like to know more about the Hunting?

Response 1 to Comment I-8:

The proposed IPBC Range will not expand the existing boundaries at PTA. Hunting is addressed in Section 3.1.2.1 and would not change.

Comment I-9: Lee Ballard

Please close Pohakuloa and take your poison away.

Response 1 to Comment I-9:

This comment is beyond the scope of this EIS.

Comment I-10: Matt McNall

I disagree with further military expansion on our island's sacred mountains. It pollutes our land and our people.

Response 1 to Comment I-10:

The proposed IPBC Range would not expand the existing boundaries at PTA.

Comment I-11: Leslie M. Agorastos

Please first understand that I was born and raised in Hawaii. I feel that I do respect the Hawaiian culture and landscape.

However, this is one crazy, dangerous world we live in today. I feel that a strong military is absolutely essential. The sacrifices that our troops make are absolutely incredible.

They risk their lives, and these are usually young men and women.

They are away from their families and often miss being with their children as they grow.

Their devotion to protecting us is unprecedented.

I am completely in favor of upgrading the Pohakuloa facilities where many buildings are from as far back as World War 2. I want our troops to have everything they need to be well trained and capable of protecting us and themselves.

Please do everything required in your project and more as you deem important.

Response 1 to Comment I-11:

Thank you for your comments.

Comment I-12: Mark Colter

We, as residents of Waikii Ranch, have major concerns over the Army's intention to expand, modernize, and construct in the PTA battle area. Here is why we object.

- 1) Fire Threat: We experienced just last month a major fire that reached within a mile of other borders of Waikii Ranch. The tow county helicopters using the small dipping tanks to stop the spread of 2,000+ acre blaze showed just how inadequate and unprepared the Army is to handle such a threat. Lucky for us the old Pa'ali water tank still had water or we would have had the fire at our doorstep. The Army to their credit finally bulldozed a fire break, but that should have already been in place. With all of the cattle removed from the 25,000 acre ex Parker Ranch property that surrounds Waikii, a wet season that created large volumes of fire fuel, and no water source to service the area, the Army is nowhere close to being ready to handle what they have committed to. Now, they would expect more expansion? What exactly are the Army's fire prevention plans?

Response 1 to Comment I-12:

As described in Section 4.15.3 in the EIS, the Army will fully implement the Integrated Wildland Fire Management Plan (IWFMP) and also take actions such as fuel reduction and Soldier education.

- 2) Hazardous Air Threat: We still have not seen the effects of massive troop movement on the Ke'āmuku area. Once the dry land grasses, fireweed, and ground covers are removed by foot and vehicular traffic, we will then certainly see the dust level in the air raise, especially in the dry season and strong trade wind summers. DU threat may be a real possibility too. What exactly are the Army's dust mitigation plans and DU monitoring and reporting procedures?

Response 2 to Comment I-12:

There is no depleted uranium found at KMA. As discussed and updated in Section 4.4.3, dust control will be managed through operational controls that would be enacted in conjunction with training activities. If excessive dust occurs, the Army will undertake measures to control the dust, such as applying dust control chemicals (palliatives) or water, and shifting or rescheduling activities as appropriate.

In addition, the Army will undertake measures for both mobile and stationary source controls to include reduce trips and idling vehicles, maintaining vehicle engines, and requiring vehicles to drive on existing roads.

- 3) Noise Threat: We live in such a close proximity to the training area that our dog needs tranquilizers when the bombing is active. Increased activity would certainly cause even more decibel discomfort to us and the critters that live here. Sometimes the windows rattle when the bombing is heavy.

Response 3 to Comment I-12:

Any resulting decision from this EIS will not increase live-fire training at PTA. Units would continue to deploy to PTA to conduct training on mission essential and required pre-deployment tasks.

Visual threat: Air traffic flow, Helicopter and otherwise with increased training in the PTA area would definitely impact not only Waikii, but the Island in general.

Response 4 to Comment I-12:

Visual resources are usually defined as the visual quality or character of an area, consisting of both the landscape features and the social environment from which they are viewed. For the evaluation of cumulative impacts relative to visual resources, the cumulative ROI for visual resources encompasses PTA and all areas within line-of-sight of PTA.

Our opinion is that there are more suitable places to train on the mainland that would not have the impact or degree of threats we have referenced in this letter. Thank you for your time to listen to our concerns and we hope that we have made a difference.

Response 5 to Comment I-12:

The only place suitable for training both Hawaiian brigades on the mainland is Fort Irwin, California. Soldiers would be required to stay 30 plus days per rotation or longer to make CONUS deployments economically feasible. This is the length of deployment to Fort Irwin, California. According to Chapter 1.3.1, deployments to PTA could also last up to 30 days. Family members do not travel to either place. The real difference between Fort Irwin and PTA is the cost of travel for personnel and equipment; a rotation to Fort Irwin is much more expensive. Fort Irwin is limited to exercises for full BCTs and can only support 10 such exercises each year. Fort Irwin also serves the entire Army. By contrast, PTA can host battalion size exercises.

Comment I-13: Mark McNett

Dear U.S. Army et al: Please do proceed w/ all your planned improvements. Upon departure from Waimea Elem. Sch., Kamuela, HI after meeting's end, Corpsman Cepeda shook my hand and "thanked me for the words", but all said and done they are only mere words yet. Deeds done by heroism's most heroic heroes like Medic Cepeda and his Medic father before him are what make all the differences in this life in this world. The opponents to this project are for the most part illegal, unlawful, outlaw, un-reporting, unregistered lobbyists unaccounted to any government entity as to their funding sources. This I vow to you that there will be less of them in our future and that is the very least I can do to expose them for what they are.

Response 1 to Comment I-13:

Thank you for your comments.

Comment I-14: Hanalei Fergerstrom

I am troubled the way this EIS is presented as it combines several different components while underplaying the public's concern over the component of the STRYKER Brigade and HAMET training program. There has already been several hearing and Environmental Assessments on both the STRYKERS and HAMET yet these two subjects are treated in this Draft EIS as almost incidental, and their impact minimized. Both the STRYKER and HAMET Environmental assessments should be included as part of this overall Draft Programmatic Environmental Impact Statement.

Response 1 to Comment I-14:

Chapter 5, Cumulative Impacts, addresses the impacts of current and proposed projects at PTA and Hawai'i Island. Chapter 5 includes discussion of the Stryker and the HAMET and HAAT EAs.

Our greatest concerns lie with the expansion of Pohakuloa Training area and the complete disregard for the many endangered species that are already in the existing training area. Your documentation spells out that the greatest danger to the endangered species already found within the Pohakuloa Training Area

spells out the greatest danger for those species identified is the threat of trampling and fire. There seems to be little concern over the very real threat of losing entire species.

Response 2 to Comment I-14:

Please see the response to F-1 on biological resources at PTA.

It has been stated that there is not an expansion of the Pohakuloa Training Area, I differ with that statement. Once again I draw your attention to the HAMET program that seeks to use both Mauna Kea and Mauna Loa for landing zones for your helicopter training. As all the LZ's are outside of the existing Pohakuloa Training Area.

Response 3 to Comment I-14:

Chapter 5 addresses the impacts of current and proposed projects at PTA and Hawai'i Island and includes the HAAT EA.

In the final environmental assessment for the HAMET program, a challenge was made to utilizing Public / State Conservation Lands without the need to follow State conservation district use permitting process. The response given was "The Army is a Federal Agency. Under the Supremacy Clause of the U.S. Constitution, State Governments cannot impose regulations on the Federal Government that may impede or impair it ability to operate unless it is specifically authorized by Congress. Thus the Army cannot be required to enter into a State CDUP process. The Army does however recognize the need to comply with the protections and safeguards of Hawai'i's CDUP"

The National Endangered Species Act is an act specifically authorized by Congress for the protection of endangered species. The Palila Bird has been identified as National endangered, and it's Critical Habitat identified and designated. The flight path for HAMET on the Mauna Kea side goes directly over/through this critical habitat to reach the landing zone on State Conservation land.

The Army claims that the permits for entry into State Conservation land is for the temporary use of these areas and only for the 20 day period in October 2011. The jurisdiction of the lands remain with the State of Hawaii.

It is my contention that these LZ's are not temporary, but are designed for continuous use, therefore should be treated as fixed sites on State Conservation land without proper permitting. The flight paths to those LZ crosses critical habitat of the national endangered Palila Bird which is federally protected as well as located on State Conservation lands.

Response 4 to Comment I-14:

Please see the Finding of No Significant Impact (FNSI) for the HAMET EA, which can be found at the Internet Web site: <http://hawaii.gov/dlnr/chair/meeting/submittals/110909/HAMET-Appendix-Final.pdf>

Comment I-15: Don Kephart

I will be unable to attend the public meetings regarding the draft EIS for the proposed upgrades to the Pōhakuloa Training Area. Nevertheless, I would still like to offer my input for whatever it is worth...

As far as I am concerned, if we are going to send our young people into harm's way, then we owe it to them to provide the best training available. If that means modernizing the PTA, then by all means go for it.

Response 1 to Comment I-15:

Thank you for your comment.

Comment I-16: Lawrence K. Kurozawa

I am a member of the Veterans of Foreign Wars and fully support the Army's need to use PTA for training. Our troops need as much training needed before they are sent into harm's way. I believe some of the terrain at PTA is similar to Afghanistan.

Response 1 to Comment I-16:

Thank you for your comments.

Comment I-17: Jack B. Bovee (missing complete scan)

I am not a Hawaiian but have lived Hawai'i since 1982. I built my 1st house (not contractors). Ocean view Estates and 2nd house at Captain Cook. I was in Signal Corps 1944-46, I feel the area they want to build good a training area for our future welfare and is ideal. I'm 85yrs 8months old. Love Hawai'i – had good personal friends like "Uncle George" (now dead) called him "young man" since I was a year older Keep up the Good Work.

Response 1 to Comment I-17:

Thank you for your comments.

Comment I-18: Diane Ware

I can only support the "No Action" Alternative.

- 1) The environment around Mauna Kea has been significantly impacted by humans including grazing, clearing by bulldozing, introducing pigs, sheep and goats. Dryland Hawaiian, ecosystem has only 5-10% intact. Every tree shrub and birds is significant to the culture, watershed, and future generations.

Response 1 to Comment I-18:

The Army takes our responsibilities toward the natural environment of PTA very seriously and we endeavor to locate and preserve as many natural resources as possible.

- 2) We need to drastically cut military spending. This "war" is unjustified. We are killing innocent people aimed at "rogue" strikes in a country whose government we work with. Bring troops home, release them, and keep military off Islam.

Response 2 to Comment I-18:

Your comment is duly noted but outside the scope of the EIS.

- 3) Fire hazards are extreme at saddle area, costly and this expansion subsequent action will endanger ecosystem, lives and costs to control are excessive and unnecessary.

Response 3 to Comment I-18:

Given the risk to lives and the ecosystem, the Army does not feel that the cost of preventing and suppressing wildfires is excessive. The EIS describes the Integrated Wildland Fire Management Plan (IWFMP), which would be fully implemented as part of this action.

Comment I-19: E. Kalani Flores, Kanaka Maoli (Native Hawaiian) Cultural Practitioner**Summary of Concerns**

1. The proposed activities identified in the Draft PEIS (especially when assessed from a cumulative perspective of this impact along with the past, present, and future activities associated with PTA) would contribute to a significant disturbance to the Pōhakuloa area. Consequently, these types of activities create a physical and spiritual disturbance, disconnection, or imbalance between man and his *akua*, and between man and his environment.

Response 1 to Comment I-19:

The Army takes our responsibilities toward the cultural patrimony of PTA very seriously and we endeavor to locate and preserve as many cultural resources as possible.

2. The Draft PEIS does not include adequate Section 106 Consultation with Native Hawaiian Organizations and/or individuals as required by federal law. In addition, the PEIS should include Section 106 Consultation for both the PTA modernization proposal and the IPBA.

Response 2 to Comment I-19:

The EIS has been revised to a site specific EIS for the construction and operation of an IPBC Range. Please see Response 15 to Comment F-2 for a description of the Army's Section 106 consultation. NEPA EIS review and NHPA Section 106 review are parallel but separate processes. Federal agencies are discouraged from completing one before the other so that neither pre-determines the outcome of the other. Federal agencies are encouraged to coordinate the processes, which is what the Army is doing for this EIS.

3. In addition, this Draft PEIS has failed to consider and/or disclose the adverse impacts of the proposed actions upon the ancestral *akua*, '*aumākua, kupua, kia*'i and other connected to the area of Pōhakuloa.

Response 3 to Comment I-19:

The effects on the spiritual characteristics of the area are difficult to measure in terms of archaeology or the other scientific tools at our disposal. However, based on the comments the Army has received, we understand that our activities could constitute a physical and spiritual disturbance. We recognize that some people are more sensitive to these impacts than others and we appreciate that you have brought them to our attention.

The Draft PEIS is deficient for not identifying historic properties eligible for the National Register and/or eligible to be nominated as a Traditional Cultural Property (TCP) within PTA that might be impacted by the proposed actions. In addition, the Draft PEIS does not include any detailed discussion and survey maps identifying historic properties and cultural resources in the PTA ROI.

Response 4 to Comment I-19:

Surveys identifying potential cultural resources within the preferred alternative area are complete; the Final EIS includes the results of these surveys. Evaluation surveys for site significance were completed in February 2012. Consultation with the SHPD, Native Hawaiian Organizations, and interested parties was started in March 2011. Figure 3.10-2 provides the recorded archaeological sensitive sites at PTA. Site survey information is available upon request. Two previous studies have not identified any Traditional Cultural Properties at PTA, nor any Ethnographic landscapes. Only archaeological sites have been identified. Section 3.10 of the EIS has been revised to include this information. Through the processes established in the PA, the opportunity is available to identify additional historic properties if the information is forthcoming.

4. The Draft PEIS should reflect that cumulative impacts on the access to natural resources and recreation resources has been and will continue to be significant at PTA.

Response 5 to Comment I-19:

Chapter 5 addresses the impacts of current and proposed projects at PTA and Hawai'i Island.

5. The Draft PEIS should reflect that cumulative impacts on the visual resources has been and will continue to be significant at PTA.

Response 6 to Comment I-19:

Chapter 5 addresses the impacts of current and proposed projects at PTA and Hawai'i Island. Visual resources are usually defined as the visual quality or character of an area, consisting of both the landscape features and the social environment from which they are viewed. For the evaluation of cumulative impacts relative to visual resources, the cumulative ROI for visual resources encompasses PTA and all areas within line-of-sight of PTA. Major projects that have or could impact visual resources within the cumulative ROI include the Saddle Road Realignment and the proposed HAAT training.

DISCUSSION OF CONCERNS

1. At the core of Kanaka Maoli (Native Hawaiian) beliefs and customary practices is the cultural perspective of *aloha 'āina* (deep love and respect for the land). The existing and proposed activities at PTA are causing a severe disturbance, destruction, and desecration to the *'āina* and everything and everyone connected to it at many different levels and dimensions.

Response 7 to Comment I-19:

The effect on the spiritual characteristics of the area are difficult to measure in terms of archaeology or the other scientific tools at our disposal. However, based on the comments the Army has received, we understand that our activities could constitute a physical and spiritual disturbance. We recognize that some people are more sensitive to these impacts than others and we appreciate that you have brought them to our attention.

Section 106 Consultation with Native Hawaiian Organizations (NHO) and individuals have not been adequately done for this project. It is uncertain if page C-4 reflects those who have been sent letters regarding Section 106 because it lacks a heading on that page. If so, then that listing is comprised of primarily 8 governmental agencies and only 3 non-governmental agencies. Secondly, the listing is outdated and does not adequately reflect the number of other NHOs and individuals that should have been directly consulted regarding this project. Lastly, the PTA Cultural Advisory Committee is not considered a NHO and instead serves as an advisory to the PTA Commander. Therefore, it should not be listed as it implies that it is a NHO or a governmental agency who has been consulted. However, if members have been sent letters as representatives of a NHO or as individuals, then perhaps it might be appropriate to identify these NHOs and/or individuals in this listing, but not as a collective PTA Cultural Advisory Committee. Appendix C should include a more detailed description and documentation of what type of Section 106 Consultation has occurred and what were the outcomes of these consultations.

Response 8 to Comment I-19:

Appendix D of the Final EIS contains a copy of the Programmatic Agreement, which includes the names of the consulting parties.

It is recommended that the preparers of this PEIS follow the guidelines provided by the Advisory Council on Historic Preservation in their document, Consultation with Native Hawaiian Organizations in the Section 106 Review Process: A handbook. An excerpt from this handbook is noted below:

Consultation means the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the Section 106 process. (36 CFR Section 800.16(f)).

Consultation constitutes more than simply notifying a Native Hawaiian organization about a planned undertaking. The ACHP views consultation as a process of communication that may include written correspondence, meetings, telephone conferences, site visits, and e-mails.

The requirements to consult with Native Hawaiian organizations in the Section 106 review process are derived from the specific language of Section 101(d)(6)(B) of NHPA.

In addition, the Army intends to eliminate any Section 106 Consultation for the PTA modernization proposed as noted on page 3-98. According to Section 101(d)(6)(B) of this act, it requires “the agency official to consult with any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to historic properties that may be affected by an undertaking.”

Response 9 to Comment I-19:

Please see Response 15 to Comment F-2 for a discussion of the Army’s Section 106 consultation. A copy of the Programmatic Agreement is included in Appendix D of the Final EIS.

2. Likewise, nowhere in this Draft PEIS has it been cited that consultation has occurred directly with those ancestral akua, ‘aumākua, kupua, kia’i and others connected to the Pōhaku area or indirectly through individuals with the ability to connect with them. Some of them are manifested in the natural elements and other life forms, while others serve in the capacity as guardians for this sacred landscape. Although this cultural perspective might seem difficult to grasp by those unfamiliar with these traditional practices, there are individuals who have the ability and gift to interact and communicate with those still connected to the Pōhaku area.

Response 10 to Comment I-19:

The effects on the spiritual characteristics of the area are difficult to measure in terms of archaeology or the other scientific tools at our disposal. Based on the comments the Army has received, however, we understand that our activities could constitute a physical and spiritual disturbance. We recognize that some people are more sensitive to these impacts than others and we appreciate that you have brought them to our attention.

An archaeological inventory survey should identify historic properties within PTA that are eligible for the National Register as well as eligible to be nominated as Traditional Cultural Property (TCP). Likewise, potential impacts upon these sites should be disclosed.

A detailed discussion and survey maps identifying historic properties and cultural resources within the PTA ROI was not included in this PEIS. Therefore, it is difficult for someone reading this document to make any appropriate comments about potential impacts upon these sites. Procedural guidelines that outline how the PTA/Army will address any proposed actions with Archaeological Sensitivity Areas should also be developed and included in this PEIS.

Response 11 to Comment I-19:

Please see Response 15 to Comment F-2.

3. Contrary to what has been written on page 5-25, the cumulative impacts on the access to natural resources and recreation resources presently are and would continue to be significant. Access to the PTA is very restricted and therefore significant. Likewise, access to hunting areas on PTA have been drastically restricted and reduced, especially with the recent fencing projects and feral ungulate eradication actions. Although hunting practices are identified in this PEIS as recreational activities, many families on Hawai’i Island rely upon hunting for subsistence purposes.

Response 12 to Comment I-19:

The Army agrees that hunting is curtailed somewhat on PTA. Nevertheless, hunting is allowed as described in Section 3.1.3.

Contrary to what has been written on page 5-28, the cumulative impacts to visual resources presently are and would continue to be significant and not consistent with visual resource policies. Many of the projects and activities at the PTA are presently very visible from the realigned Saddle Road that runs along the base of Mauna Kea at a higher elevation than the PTA. Therefore, a complete visual analysis should be included in the PEIS addressing the view sheds from along this section of the Saddle Road as well as from the access roads to Mauna Loa and Mauna Kea.

The Draft PEIS does not accurately address visual impacts as it pertains to the Hawai'i county General Plan (2005) in the area of Natural Beauty (7.2 Goals) as noted below; (a) Protect, preserve and enhance the quality of areas endowed with natural beauty, including the quality of coastal scenic resources. (b) Protect scenic vistas and view planes from becoming obstructed. (c) Maximize opportunities for present and future generations to appreciate and enjoy natural and scenic beauty. In addition, the Draft PEIS fails to disclose any potential impacts of the proposed actions upon the General Plan goals established for the Natural Resources.

Response 13 to Comment I-19:

Please see Response 60 to Comment O-3 on visual resources and Response 1 to Comment F-1 on biological resources.

Note: The afore-mentioned comments are subject to revisions when additional information becomes available regarding the proposed actions. Also, comments were limited to specific areas of this Draft PEIS. Therefore, it should not be construed that the commenter concurs with the other sections of this document that were not discussed in this letter. Likewise, the commenter reserves the right to provide additional comments in the future.

Comment I-20: Savory, P O Box 6901, Ocean View, HI 96737

BEWARE THE MILITARY-INDUSTRIAL COMPLEX!-IKE LET'S SEE HOW THEY CLEAN UP THEIR OTHER MESSSES, BEFORE THEY USE THAT AS AN EXCUSE TO COME SET UP ACCESS ROUTES ON THE BIG ISLAND! MAYBE START WITH PEARL HARBOR... OR, HOW ABOUT A MICRONESIAN WELCOMING COMMITTEE?

Response 1 to Comment I-20:

These comments are beyond the scope of the EIS.

3.6 PRIVATE TESTIMONY

3.6.1 November 8 Public Hearing

P-1: Dwight Vicente.

My name is Dwight Vicente. I am representing the Hawaiian Kingdom. Goes back to 1820 when a naval officer was dropped off as a spy. And in 1825, the Naval officer negotiated a treaty with the Kingdom, which is a direct violation of the US Constitution.

Then they kept bringing in the Navy all the time, rotating. And in 1887 they did the Bayonet Constitution with the help of some other European nationals that were brought over as mercenaries.

So at the time as the 1877 Bayonet Constitution, they had the bogus treaty they called the Reciprocity Treaty. Which here, again, is another treaty that violated the US Constitution.

Because, with that, they had a harbor in the Kingdom. Which under the US Constitution, Article I, Section 8, Clause 17, they're restricted to the United States only: Buildings, dockyards, arsenals, and things of that nature.

And what happened was they had applied – at the same time they had applied the Northwest Ordinance of 1787 to this Kingdom. And in 1893, January 13, 1893, the Queen signed a lottery bill into law.

US Minister Stevens found out and he stated that his was an act of war against the United States and caused the illegal standing Army, which was on the Navy ship at Pearl Harbor, to be landed. And they removed the queen by force. And she filed a protest on January 17, 1893, against US Minister Stevens.

At that time she didn't know where to take the protest. It was supposed to have gone to the US Supreme Court. Instead, she was misled to go through the congress and through the president, which has no jurisdiction over the US ministers or councils. US Supreme Court, under Article III, Section 2, Clause 2, has original jurisdiction in that case.

What they did was they established a provisional government, which consisted of thirteen foreign nationals, nine for the United States, two from Germany, and two from the British government. And then later created the Republic of Hawai'i in 1894. Here again, consisted of only 13 foreign nationals.

They existed only because the United States military being her illegally. And the treatise that King Kalakaua signed in 1887 was to expire in 1897. So the Republic of Hawai'i stated that they had given the crowing government lands to the United States. In other words, they had an annex, the crowing government lands to Washington DC, which here again is another violation.

Because Article I, Section 8, Clause 17 creates a Washington DC, which is ten square miles. To make Washington DC, they would have to amend it through Article V, which did not happen.

It's all because the Republic of Hawai'i could not sign treaties. That's why they had to make such a move. And it was done by joint resolution. Because in 1887, they already applied the Northwest Ordinance of 1787, which has no force and effect of law to this Kingdom, pretending that it gave the United States jurisdiction. And that's why they – they did a joint resolution they called Treaty of Annexation in 1898.

And in 1900 they created the Territory of Hawai'i. Here, again, based on the Northwest Ordinance of 1787. Totally no force and effect of law. And in 1950, the territory of Hawai'i wrote the state constitution. Territory means colony. A colony cannot write a state constitution.

And in that constitution of 1950, Steinbach (phonetic), which was appointed governor here under the Northwest Ordinance of 1787 – 1887, they applied the Northwest Ordinance, again stating they're creating the State of Hawai'i based on that ordinance, which has no force and effect of law.

United States had created 37, what you call, incorporated states based on the Northwest Ordinance of 1787. But if you read the US Constitution, it's cited that there are only 13 states in Washington DC. And there is no constitutional amendment that changes that, adding any more states through the union and for representation and taxation.

So that's why when you look at the US flag there's 13 stripes with 50 stars. That tells you there's something wrong there. Because each state should be represented by one star and one stripe.

So today there still remains the 13 states only in Washington DC and their military can only be within the United States. The Navy is to prosecute pirates in the high seas only in international waters. Congress' power to raise and support an army is only for a two-year term. They are able to appropriate monies for that purpose.

But as you can see, the United States Army has been around for a long time. And they have a Marine Corps which is not created by constitution. They have the Air Force which is not created by Constitution. They have NASA, they have the CIA. The military that they're running is for the purpose of colonization, which the US Constitution didn't authorize.

So for them to be in this Kingdom is illegal. Even by treaty it's illegal. And another thing, too, the US Military is restricted – or can only operate within the jurisdiction of the legislative executive and judicial system.

And that's why they're having a problem in Guantanamo. They're saying there's only US courts in Guantanamo. It's because the United States military cannot be where the courts are not. And that's why they're having the problem with no courts in Guantanamo.

So even in the Middle East, you can't be there. They're in Japan, they're in Germany, Italy, now Afghanistan, Iraq, and Libya. Not to mention, other countries that, through bogus treaties, they had allowed the United States military to enter which is by constitution, prohibited.

And that's why the US military budget is so big when it shouldn't have been. And it's very oppressive. Because you cannot create governments or use the military to dictate around the world. Not even in the United States they're allowed to do that, because they need court system to operate it.

So I think I'll end with that. The Queen's protest of January 17, 1893, against US Minister Stevens, it has yet to be taken to the US Supreme Court under Article III, Section 2, Clause 2, original jurisdiction.

So I'm reserving the rights of this Kingdom under her protest. Thank you.

Response 1 to Comment P-1:

Without getting into the details of how Hawai'i became a state, we should note that Congress passed a resolution in 1993 offering an apology for the overthrow of the Kingdom of Hawai'i. See Section 3.10.3.3.

P-2: Ken Manuel.

My name is Ken Manuel. I'm the operations officer at PTA. I've been retired for about over 5 years now, 25 years in the Army. And I do the safety training there.

And when troops come up there, we tell them about the land. We tell them the do's and don'ts they're supposed to do. And then a lot of them haven't been there before. So we tell them we need to take care of our land and make sure you guys do the right thing.

And, sir, what's the right thing? So we tell them: Hey, we get 90 percent of the people here in Hawai'i that like us here. The other 10 percent are the ones we need to keep happy because they don't want us here.

So we do the right thing. Take care of the rubbish. Do what we tell you to do. What you do in country is what you do when you train here at PTA. And pretty much what I learn there, I tell the guys.

That's all I have, ma'am.

Response 1 to Comment P-2:

Thank you for your comments.

P-3: Shirley Pedro.

My name is Shirley Pedro. I live out in Macui in the Puna section of the Big Island. And I live on the Department of Hawai'i Homelands agriculture lots.

In about 2000 we had a visit from the Department of Defense. I think they contracted those contractors out to come in and clean up the area that we live in for possible unexploded ordinances. Apparently, the site was used as practice for World War II, practice bombing site.

Now, there was some of us that lived in that area already. So they brought these contractors in to study the site, where the most concentrated areas of bombs were, because they believed that a lot of it were still live.

Okay. They just got through with their cleanup in, I think, March of this year where they exploded almost a hundred unexploded ordinances.

My concern is Pohakuloa has been used as a bombing site. And if down the road the Army plans to leave the site, will there be people that would be living in that area not knowing that it was used as a practice site and exposed to -- now I learned there are other chemicals that probably we should have been

aware of when these people came in to do the cleanup. They were only concerned with the unexploded ordinances, but apparently there might be other chemicals we should have known about.

And I'm concerned that if this area opens up later on, that people living in there won't know that they're exposed to different things. And someone told me, when the Army abandons an area, that they will clean it. But I don't see that.

Kaho'olawe was abandoned. Took them years to get it clean. And they still haven't finished because they ran out of funds. The area where we live in where they did the study and the cleanup, they only concentrated on areas that they found a heavy concentration of the unexploded ordinance. The rest, they couldn't. They only have so much money to do that.

Apparently there's other sites on the Big Island that have a lot of these unexploded ordinances that they are working on. So I'm just concerned for the people of the island that, you know, if they don't address these issues now before they start doing all of this *I* where does that leave us when the Army decides to leave? Thank you.

Response 1 to Comment P-3:

There are no plans for closure of PTA in the foreseeable future. Congress passed legislation in 1997; if the military closes a range, they are responsible to clean it up. Base and range closures are complex procedures that include detailed analyses of clean-up requirements.

P-4: "Kelly".

Hi. My name is Kelly. I've lived here for nine years on the Big Island. My concern -- and I brought it up before at another EIS that we had several years ago, but it was brought up tonight and I don't think it was given enough attention.

But with all this construction, with all the shooting going on, whatever they're going to be putting onto the ground, whatever kind of ordnance, how is that going to affect the aquifer that trickles down into Hilo and Kana and all the other little small townships?

Because there are concerns, health concerns about cancer and other diseases. I know, personally, of a friend who had no reason to have her thyroid removed, but it needed to be removed. And she was asked a question by her physician if she had been exposed to toxins or radioactive substances. And she is another person that came from. Ka'u. And I believe there's lots of military debris left in that area.

So with this going on, this program that's supposed to be happening *I* what will be the impact on the aquifer of this island? Thank you.

Response 1 to Comment P-4:

If spills occur at PTA, the extent of the spill is expected to be fully investigated, characterized, and remediated, in compliance with regulatory requirements. The projects are not expected to significantly increase the cumulative potential for spills that could affect groundwater quality. Because implementation of SOPs would address containment and remediation of spills, nonpoint source pollutants are not likely to interact with or accelerate any decreases in groundwater quality. The closest drinking water well is 4,000 feet deep at the Waikii Ranch (14 miles from PTA's main gate). The state monitors all drinking water sources for water quality. The lack of surface or groundwater greatly reduces the probability of contaminant migration in both the Cantonment Area and Range Area. The conclusions of an ORAP assessment of PTA conducted in 2010 (discussed in detail in Section 3.8) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the Range Areas and within the impact area at PTA. Uranium is not very soluble and does not migrate in groundwater. In addition, the groundwater table below PTA is at least 3,000 to 7,000 ft.

3.6.2 November 9 Public Hearing

P-5: Mark Colter.

My name is Mark Colter. I'm a resident of Waikii Ranch. We live close to the PTA area. We're not against the Army and training, but we do have several grave concerns. One is the fire hazard that has gotten worse since the Army removed the cattle at Ke'āmuku because we had a very wet season. There was a lot of fire fuel. There was recently a fire that got within a mile of our borders. The three helicopters and the dipping tanks were insufficient to fight a more major fire than that one was, and that was pretty major. Without water, without grazing, fire is a real issue. This was not this fire was not on the northeast side of the ranch. If the fire broke out on the northeast side of the ranch to the degree it was on the southeast, it would have been on our property. So fire is a major concern.

Response 1 to Comment P-5:

The fire in question started on a "red flag" warning day under very difficult conditions. Nevertheless, the fire was held to less than 1,000 acres and the Army believes that it showed we have adequate firefighting capabilities. The Army agrees, however, that fire is a major concern, especially to private property owners. The Army will adhere to its 2003 Integrated Wildfire Management Plan and wildfire mitigations in the 2013 BO, which is included in Appendix G of the Final EIS.

The use of Ke'āmuku lands for Stryker has not yet happened. The dust control, once that is used by foot traffic and vehicular traffic and the groundcover disturbs what is really cinder, basic cinder dust -- it's pumice once that groundcover is removed, so I want to know what the Army's plan will be for dust and air pollution. And, of course, DU is always a question, and I want to know what their plans are for monitoring and reporting, and would that be an independent agency, or would it be from within the Army's ranks?

Response 2 to Comment P-5:

There is no depleted uranium found at KMA. Training activities currently manage dust control by applying dust control chemicals (palliatives) or water, requiring vehicles to travel at slow speeds (less than 10 mph), and shifting or rescheduling activities as appropriate.

The third thing is noise from the bombing. Our dog has to take tranquilizers. Our windows rattle. With what they're intending where they say it will go back to previous levels, it's going to mean more bombing. You know, the C-17 flight path, the high altitude helicopter training, all of that shows what the expansion intentions are, and that means more bombing, so we're going to have more noise. So do they have any plans for that? Will there be any days off? Is it going to be 365 days a year? I'd like to have that question answered.

Response 3 to Comment P-5:

The Army-wide standard for range availability is 242 days (365 day calendar year minus all weekends [104 days], Federal holidays [10 days], and an additional nine [9] days for range maintenance and inclement weather) (HQDA, 2010). The revised EIS is for the construction and operation of the IPBC Range and does not include the programmatic modernization projects. Please see Response 1 to Comment F-2 concerning the Army's noise modeling results.

And the fourth thing is the visual impact of more flights going in and out. To the Army's credit, when we've complained the helicopters have gone right over the ranch, they have gone around. Sometimes it takes a while, but it seems like they're listening. But when they upgrade and the expansion and the troops come home, there's going to be a lot more visual impact, and I'm not just talking about Waikii, for all of the Big Island.

Response 4 to Comment P-5:

Please see Response 60 to Comment O-3. For the evaluation of cumulative impacts relative to visual resources, the cumulative ROI for visual resources encompasses PTA and all areas within line-of-sight of PTA. Major projects that have or could impact visual resources within the cumulative ROI include the Saddle Road Realignment and the proposed HAAT training.

For the HAMET action, the Army assessed 16 representative viewpoints based on what were considered sensitive to cultural practitioners, sightseers, and residents. The Army conducted a spatial analysis in order to determine the potential that sightseers or cultural practitioners at these locations could observe helicopter training. The Army determined through analysis that HAMET flights would be unlikely to obstruct the view of natural beauty sites within the Hāmākua and North Hilo planning districts. In addition, those sites were not accessed by large amounts of people. The proposed flights and related impacts, such as air quality, would be intermittent in nature, lasting only the duration of the action.

So I personally am for them doing the training elsewhere.

The end.

P-6: Pete Hendricks.

Okay. My name is Pete Hendricks, H-e-n-d-r-i-c-k-s. I have been a resident of Waimea since 1969 and very active in the community. I'm familiar with the operations of the Army and other military units at Pōhakuloa and in several of my capacities as community association president here and deputy managing director for the county.

I've had various experiences with the Army, and I'd like to go on record as saying that I am in favor of the Army's operation at Pohakuloa. They've come a long way in improving their impact and their operations and community relations over the last few years, and I'm in support of the very necessary realistic training that's proposed at Pohakuloa.

And I appreciate the concern with environmental management and quality that the Army has shown, so I guess in general I don't have anything negative to say. But I want to make sure that we continue to be very responsible for the environmental concerns at Pohakuloa and concerns of the people of the Big Island.

Thank you.

Response 1 to Comment P-6:

Thank you for your comment.

P-7: Sherman Warner.

When I saw the recent picture on the front page of "west Hawai'i Today" that showed soldiers training at Pohakuloa with orange tape on the ground indicating where a hallway would be, I thought this is crazy. I was a Broadway producer. We put tape on the floor to rehearse actors. You don't train soldiers that way.

I served in the Army during Vietnam during that period, not in Vietnam. I was in the Hawai'i National Guard. I was activated on May 13th, 1968. We were sent to Schofield Barracks, and they would take one or two people a day, and I remember the time that my first sergeant was called for active duty in Vietnam. Being first sergeant was a full-time State of Hawai'i civil service job. He had spent less time on active duty in the Army than I had, but he was activated. He was called to go to Vietnam.

He invited me to his going away party, and he took me aside in his backyard and said that he was terrified. And what he was terrified of was that he would be put in charge of people in a combat situation, and he didn't know what he was doing, and their lives would be at stake. And I've always remembered that.

I'm against these wars. I'm a pacifist. But I believe if you're going to send people into them, you send them well trained, and nobody should be pretending they're in a building because they're walking between two orange lines on the ground. It is just simply wrong. They have to be well trained. The facility has to be the best that it can be for that purpose.

Response 1 to Comment P-7:

Thank you for your comments.

3.7 PUBLIC HEARING TRANSCRIPTS

3.7.1 November 8 Public Hearing

H-1: Dwight J. Vicente.

Good evening. My name is Dwight Vicente. I will be representing the Hawai'i Kingdom.

Looking at the history of the United States military here, it goes back to 1820. The United States dropped off a naval spy to influence its kingdom. In 1825 a naval officer negotiated the first treaty with the kingdom, which is a violation of U.S. Constitution. In 1887 they imposed the Bayonet Constitution on King Kalakaua by use of foreign mercenaries, most of them from Europe, most of them being Portuguese, with the assistance of their military, and the Bayonet Constitution followed with the Reciprocity Treaty.

This is where the Northwest Ordinance of 1787 was first applied to this kingdom, and what it did was the United States claimed jurisdiction based on an unauthorized ordinance. It became jurisdictional from that point on under the U.S., which is questionable because the Northwest Ordinance said no force and effect of law, and that's why most people wonder why in 1898 a joint resolution was used. Well, it's because of the Northwest Ordinance.

In 1950 the State of Hawai'i was created by the Northwest ordinance as Stainback stated in his first message of the 1950 constitutional convention. So is the State of Hawai'i a state? No. It's a corporation. How many of those corporations were created by the Northwest Ordinance? Thirty-seven. The United States is only thirteen states.

U.S. military jurisdiction is only within the United States. That's how the constitution was set up. The Army is only -- congress' power to raise and support an Army is only for a term no longer than two years, so some of the enlisted officers ought to check out their contract. It's void. They should be bailing out right now, and I don't think they'll be getting paid with Federal Reserve Notes.

Under Article I, section 8, clause 17, the united States congress can purchase with the consent of the legislature of these (unintelligible) buildings, dockyards, arsenals, and that's only within the United States. Today they have not purchased any lands here in the kingdom because the constitution first of all restricts it. They're illegally occupying kingdom, which they have no constitutional authority to do. It's not only the Hawaiian Kingdom. They're in Japan. They're in Germany, Italy, Afghanistan, Iraq, and probably now in Libya, not to mention other countries that was duped by treaty to allow their military into the country. It's called military occupation. So the Hawaiian Kingdom is not alone. We are unique, though, because we are a kingdom, and we're not a colony under any other country, especially the United States.

So that being said, I'm going to end with the reservation of the kingdom's rights under the Queen's Protest of January 17, 1893, against U.S. Minister Stevens, which has yet to go to the U.S. Supreme Court under original jurisdiction, Article III, section 2, Clause 2. Thank you.

Response 1 to Comment H-1:

These comments are outside the scope of this EIS.

H-2: Ms. Cory Harden.

Good evening. First a personal comment. The military is here illegally, so this whole thing is pretty crazy.

Comments for Sierra club: We commend the Army on several counts. They have at least acknowledged, I think for the first time in the military EIS, the U.S. takeover of the Kingdom of Hawai'i. They also did include a thoughtful description of the spiritual and cultural significance of Pōhakuoloa. They did mention old military sites, and they are holding this open house and public hearing.

But we have many concerns about this action. The main one: Is this the only place in the world that this training can be done? Why was Pohakuloa the only place considered? That was a big problem with the Stryker, and this could be a major problem with this too. Why does the EIS say there's no danger from depleted uranium? There are only a few fragments of DU spotting rounds found at Pōhakuoloa, but there may be 2,000. I'm basing that on two things. One is the estimated number of firing pistons indicates 600 to 2,000 associated spotting rounds, and also the number of rounds that soldiers were required to shoot according to training manuals also indicate about 2,000. Where are the rest of the 2,000 spotting rounds?

Response 1 to Comment H-2:

The EIS states "based on what is currently known of DU at PTA, no adverse human health impacts are likely to occur as a result of exposure to the uranium present in the soils at the installation." The shipping records indicate 714 M1 Spotting Rounds were delivered to Hawai'i; there is no reason to believe there was more than that. The Army does not know the exact number fired at each location; the Army knows that up 714 rounds were fired in Hawai'i for training at PTA and Schofield Barracks. The rounds were split for usage at PTA and Schofield Barracks. The M101 Spotting Rounds were fired into the impact areas.

Also why did DU air monitoring, as planned last year, have air filters with pores that were ten times too large to detect oxidized DU? This is according to Mike Reimer, a retired geologist.

Response 2 to Comment H-2:

The air sampling procedure followed EPA protocol. The Teflon filters used in the monitoring program were certified for EPA PM2.5 monitoring. They had a minimum retention of 99.7% for 0.3 micrometer particles.

We're also told often it's too dangerous to go in the impact area to hunt for DU or to look for cultural sites or something, but this project, they're going to send in D9 bulldozers to crush lava for a one-by-two-mile out course in the impact area, and that's no problem.

Response 3 to Comment H-2:

For proposed new construction, the Army conducts surveys within the construction footprint. Surveys are conducted with experienced EOD technicians who escort the natural or cultural resources staff in the impact area. The Army does not survey within the Improved Conventional Munitions (ICM) area which is the central portion of the impact area because of the danger. The overall footprint of the IPBC is 200 acres, which is a much smaller area.

I'm worried about chemical weapons, whether the air monitoring will detect them. These were found at Schofield, another surprise about the time that DU was found there. So you got to wonder just what hazards are lurking out there. Apparently nobody knows.

Response 4 to Comment H-2:

There is no documented evidence that any chemical weapons were stored or used at PTA.

Some of the training once done at Mākua is coming to Pohakuloa. The training at Mākua brought fires there that consumed 800 acres thirteen years ago, burning outside firebreak roads; 2,000 acres eight years ago when a controlled burn went wild; 300 acres six years ago and 100 acres just a month ago during ordnance cleanup. At Pōhakuloa the fire tornado and week-long fire last year was not caused by the military, but it did show what can happen in this tinderbox area with no county water.

Response 5 to Comment H-2:

The IPBC is not designed to be a replacement for MMR or other Oahu-training areas. MMR is prone to fires because of its slope, vegetation, and other factors. Having said this, wildfire prevention and suppression is very important for the Army at PTA. The Army has an Integrated Wildfire Management Plan for PTA and the resources to effectively address wildfire events.

Pohakuloa is a tremendously significant cultural area. Many sites and features were found in the project area, but the reports and historical consultation are not complete, so it's difficult to comment tonight.

Response 6 to Comment H-2:

Please see Response 15 to Comment F-2.

The EIS about wildlife says that the wildlife will temporarily leave the area during periods of loud noise and disturbance but may return. Now, how would we do if every few months we got chased out of our homes? The project area is likely to have bat habitat and migratory birds, has some federally listed plants, but the reports aren't complete, so there's less opportunity to comment.

Response 7 to Comment H-2:

Wildlife is expected to habituate near human presence and training activities or to temporarily / permanently evacuate the area. This expectation is consistent with human activity and wildlife in developed areas in general. Please see Response 1 to Comment F-1.

And we ask, as we always ask, why is there always so much money for new military projects and so little for cleaning up hazardous old sites?

Response 8 to Comment H-2:

The Restoration Program continues to receive significant funding towards military clean-up of contaminated sites. In the Annual Report to Congress, DoD submits a report on its accomplishments during the past year in its restoration, conservation, compliance and pollution prevention programs by addressing plans, and funding needs for protecting human health, and sustaining the resources DoD holds in the public trust (<https://www.denix.osd.mil/arc/>).

Thank you for considering our concerns.

H-3: John Ota.

My name is John Ota, born and raised on the Big Island of Hawai'i. This island has been used by the military since World War II and continues today. The continual destruction and desecration against nature, the environment, safety and health, hazards created against the population continues to the present day. This island is not a property of the United States. Even today, all of the Hawaiian Islands belong to the Kingdom of Hawai'i and its people.

Although the Department of Defense created the initial military problems on this island, the cleanup of all the unexploded ordnance MEC/UXO is not complete. Ammunition has still been discovered on the island and in the shoreline even today. Why is this occurring when the populace is led to believe that the cleanup was completed?

Response 1 to Comment H-3:

The Army does not clear unexploded ordnance (UXO) from active ranges as part of range maintenance but it is done if construction activities or target emplacement are in that particular area. The Army is continuing to cleanup inactive ranges under the Military Munitions Response Program (MMRP), and sites that qualify under the Formerly Used Defense Sites (FUDS) program.

The depleted uranium causing health hazards to the populace is still in limbo. Kona population has the highest rate of cancer per capita in the United States. This issue has not been resolved. The Army states that it is unable to locate all of the exploded DU rounds due to the type of lava rocks at the site. This is an excuse, not a remedy. The number of exploded DU rounds is a big question mark. Nobody knows for sure. No one knows for sure how many rounds were exploded. The Army installed old, dilapidated DU detection devices instead of modern devices that are available today to collect DU samples, and this is on this island. These old devices became inoperable, and spare parts are not available to repair them. This issue remains the same today. Consequently, no action was taken by DOD trying to resolve this DU problem.

Response 2 to Comment H-3:

There are many factors that can cause cancer. The shipping records indicate 714 M1 Spotting Rounds were delivered to Hawai'i; there is no reason to believe there were more than that. The Army does not know the exact number fired at each location; the Army knows that up 714 rounds were fired in Hawai'i for training at PTA and Schofield Barracks. The rounds were split for usage at PTA and Schofield Barracks.

The very old issues need to be addressed and rectified before visiting the PEIS issue at PTA. How long will it take the DOD or Army to clean up all of these issues? The request for modernizing PTA to increase usage capabilities cannot be supported until all prior issues are resolved.

Response 3 to Comment H-3:

The Army is working diligently to resolve a number of environmental issues at PTA. Some are complex issues and many take an extended period to resolve. Nevertheless, our training mission and responsibilities to our Soldiers to provide adequate training cannot be postponed.

The Draft PEIS dated October 2011 on the cover sheet and page 3, illustrating approval of the Draft PEIS, are the only two pages that are Draft PEIS. This is the cover sheet. It says "Draft PEIS" on this sheet.

This page says "Final," not "Draft," and it's in the same brochure, the same program. You can check out the original booklet over there, and you will find the same thing. Therefore, pages 5 through 40 are all part of the Final PEIS. Consequently, the public scoping being conducted today do not have an agenda. Someone who approved this so-called Draft PEIS did not review the contents of this document.

Response 4 to Comment H-3:

The Army incorrectly labeled the Draft EIS abstract page as DRAFT. The abstract has been revised and correctly labeled as Final EIS.

FACILITATOR GOMES: Mr. Ota.

MR. JOHN OTA: Whoever that Army colonel is--

FACILITATOR GOMES: Mr. Ota.

MR. JOHN OTA: One sentence left.

FACILITATOR GOMES: okay. Great. Thank you.

MR. JOHN OTA: Is this how the military is run today? Is this why the U.S. is unable to defeat the enemy in Afghanistan?

H-4: Kihei Solinihou.

How many weeks do I have?

Mahalo, Ku'umea. I'm not so happy (un-translated pidgin language). Is there a reason why no more pidgin translator? Because we also have people who talk like this. We don't talk (un-translated pidgin language). We're fortunate for someone who can olelo, but you know, most of us, you know (un-translated Pidgin language).

Response 1 to Comment H-4:

The Army had a Native Hawaiian language translator at the public meetings. We hope that this enabled a majority of commenters to get their points across.

So anyway, having said that, I want to address my concerns first of all to the EIS itself. When I looked at the document itself, I look up the -- I seen where the Native Hawaiian sovereignty. So I asked the guy, "What does this mean?"

"I don't know. You go ask the expert."

"And who is the expert?"

"Oh, that's the wahine over there. She got a Ph.D. in archaeology."

I asked her, "What is this Native Hawaiian sovereignty?"

She said she don't know.

I said, "HOW come you don't know? You're the expert."

Well, to make a long story short, in the EIS it has only a small paragraph dealing with Native Hawaiian sovereignty, and one of the items in their talks about

Public Law 150, and it doesn't mention anything of the public law itself. It only mentions it.

But what I'm trying to say is that with all the testimonies that we have been presenting all these years, all these people who talk about Kuokoa, we have only one small paragraph, and even the experts don't know what that paragraph is.

Response 2 to Comment H-4:

Section 3.10.2.3 addresses the loss of Hawaiian sovereignty; the Army is aware that the issue remains controversial.

So I asked them another question: How does the Declaration of Indigenous Rights affect the EIS or the occupation of the military at Pōhakuloa?

Unfortunately like all Ph.D's, she doesn't know everything. She only knows what she's been told to know. So therefore the EIS in itself is shortchanging those people who promote Kuokoa.

And one of the things I noticed in there, it talks about consultative status. So at another meeting with OHA, I asked what is the legal -- to define what does consultative status mean. I went to a school in Sisimiut, Greenland, and it dealt with the Declaration of Indigenous Rights, and one of the things I learned there about consultative status is that there has to be an equal opportunity for those who oppose and support a certain policy.

Well, my understanding from my experience is that it's not happening for those who oppose the militarization of Pohakuloa. So I asked OHA should we occupy Pohakuloa, what kind of legal assistance can we get? Well, I'm going to ask the same people who organized this forum. What kind of deal,

assistance can we get if we do occupy Pohakuloa? Will there be a legal defense fund to help us in our legal cases? Because that's what consultative status means is that everybody is on an equal footing. The playing field is all even. If you have attorneys to support your principles, then those who oppose it are to have the same opportunity.

So one of the last thing is that -- what? oh, sorry, Ku'umea. I don't have my glasses on. What does it say?

FACILITATOR GOMES: It says, "Pau. Wrap it up" so somebody else can go.

MR. KIHEI SOLINIHO: well, I'm sorry I don't have my malo, so I can't wrap it up quickly. Anyway, in ending my mane'o -- translate that, please -- I'd like to say that if we do provide strong resistance, what kind of legal assistance can we get from the United States of America? Thank you.

Response 3 to Comment H-4:

The Declaration of Indigenous Rights applicability to PTA is beyond the Army's ability to resolve. Any questions of legal assistance should be directed to state officials.

H-5: Jim Albertini.

Aloha kakou.

THE AUDIENCE (COLLECTIVELY): Aloha kakou.

MR. JIM ALBERTINI: Even to our military brothers over here.

I would like to speak with passion on the issues of justice and peace. We try to extend aloha to even those who step on our necks.

Our organization, Malu 'Aina, does not want the U.S. training anywhere to do to others what the U.S. has already done to Hawai'i, overthrow and occupy its government and nation, desecrate its sacred sites, and contaminate its air, water, land, people, plants and animals with a wide range of military toxins, including depleted uranium. We want the U.S. to stop bombing Hawai'i, and we want the U.S. to clean up its opala, which is rubbish.

We want the U.S. to do what Gandhi told to India what Gandhi told to the British in India, and that is to quit Hawai'i. We don't need Shoothouse here on Hawai'i Island. We need to stop going into other people's country and shooting them in their own houses. Waikiki McDonald's was turned into a Shoothouse. A Native Hawaiian was murdered by a Department of State Security APEC official. We need houses of justice and peace here.

The Army is stonewalling our community on a range of issues. The main one for me right now is seeking the truth about depleted uranium contaminated at Pohakuloa. The Army has repeatedly made unreliable safety claims based on questionable assumptions, scientific methodology, and no peer review studies. The bottom line is this: The Army does not want to risk having to shut down Pohakuloa if it is determined that the presence of depleted uranium and other military toxins pose a threat to the health and safety of the troops who train there and residents and visitors of Hawai'i Island. While the Army says that health and safety is the primary concern, in truth it is continuing the military mission that trumps all.

Response 1 to Comment H-5:

Thank you for your comment. The Army hopes that the EIS process has opened the lines of communication and improved sensitivity and understanding between the Army and our neighbors.

The Hawai'i county Council on July 2nd, 2008, passed Resolution 639-08 by a vote of 8 to 1. The one vote against the resolution was by retired Army Intelligence colonel Pete Hoffmann. That resolution called for eight action points, but number one was this: stopping all live fire at Pohakuloa, anything that creates dust, until there's a complete assessment and cleanup of the depleted uranium present there.

This past legislative session, Senate Concurrent Resolution 118 was introduced in the Hawai'i State Senate, companion in the House. Malama Solomon, senator from this island, told me on Friday night that that resolution never got even a hearing because of enormous pressure put on the legislature by the military. What is the military doing pressuring the legislature not to have a hearing on depleted uranium contamination?

Response 2 on Comment H-5:

Army personnel had office calls with the resolution sponsors to ask what their concerns were, update them on Army efforts, and answer any questions they may have. These personnel did not place pressure on Senator Solomon. She volunteered to pull her resolution. Conversely, her counterpart, Senator Gil Kahele chose to let his resolution proceed. It was never the Army's intent to place pressure on members of the legislature. The Final EIS now has considerable additional information on depleted uranium, and includes a summary of information related to the Nuclear Regulatory Commission licensing process.

AUDIENCE MEMBER: Good question.

MR. JIM ALBERTINI: What we need is this: We need comprehensive, independent testing and monitoring with citizen oversight to determine the full extent of the radiation contamination at Pohakuloa. It should be paid for with federal funds because it's a federal problem, not county, state or OHA funds. If the military has nothing to hide, they would say, "E komo mai," "Come." But your stonewalling says a lot. It says that you do have something to hide, and we want that to end.

Mahalo.

Response 3 to Comment H-5:

The U.S. Army Installation Command has applied to the NRC for a license to possess and manage residual quantities of DU at various Army installations where DU munitions, specifically the M101 Spotting Round, were used in training exercises. These installations include the Schofield Barracks and PTA. The Environmental Radiation Monitoring Plan for PTA was submitted to NRC Office of Nuclear Material Safety and Safeguards for approval in February 2012. The license, once granted, will require the Army to perform specific functions designed to protect public health and safety and the environment. These include a radiation monitoring program and physical access control consistent with NRC's regulations for protecting the public against radiation. Should DU be discovered elsewhere on Army installations, the Army will conduct an environmental survey to determine if that area needs to be included in the monitoring and access control programs under the license. These programs will support future site decommissioning and cleanup.

H-6: Gelen Kelly.

Thank you. Aloha.

THE AUDIENCE (COLLECTIVELY): Aloha.

MS. GELEN KELLY: I speak as a mother of someone who served in Iraq, now 33 years old, and came home very sick and will be on medication probably for the rest of her life, and so she was greatly impacted by this mission that is going out all over the world and not only doing toxic things to our Mother Earth but hurting the people.

So that said, under your concerns on the board over there, of course you listed DU, and, you know, "concern" for DU just seems like such a mild word. It really should be listed as urgent priority and not because a couple of local activists say so but because the global scientific community says so. We have them screaming that this is a very, very dangerous thing, very dangerous, and it should be high priority. I mean it's like all operations should stop until that's corrected.

Response 1 to H-6:

Thank you for your comment. The Army hopes that the EIS process has opened the lines of communication and improved sensitivity and understanding between the Army and our neighbors.

Let's see. Oh, anyone that wants to research that, just put in "depleted uranium," put in "Fallujah." Horrible deformities, birth defects, children born with grotesque disfigurements.

Another concern is Hawaiian sovereignty. Well, if you're truly concerned, it would seem to me you would apologize and unoccupied. I remember seeing a movie last year on Princess Lili'uokalani, and at the end, it says, "Bill Clinton made a formal apology to the people of Hawai'i for the overthrow." And I thought, wow, it was like he was saying, "We're sorry, but we're staying." It was such hypocrisy.

And then I read on the first PowerPoint presentation over there, "The soldiers are training to fight and win." But who loses? Two million Iraqis? How many thousands of others in other countries, innocent people, and lives interrupted and changed forever?

The project also boasts that it's a ten-year span. To me, that says ten years more of empire expansion, resource grab from innocent countries around the world that did nothing to us. "We need your oil. We need your water. We need your resources, your heavy metals, and whatever else you have. We need your ports so we can control the shipping." It also means more conquering. To me, Creator weeps that this is happening to his creation.

We have an awakening going on. California sheriffs have just come forth. Many vets are coming forth. Police are coming forth, are joining with the people in the fight to stop our world from spiraling down, and so I guess tonight I'm here with an outreach to all military personnel, part of my human family.

Just on a side note, there was a 40-second video on the Internet today. I only could watch two seconds because I'm very sensitive to animals, and it was military soldiers beating up an innocent sheep brutally to death, and this must come from the stress of being involved in an organization that promotes killing.

And so to the military, I will end by just saying you're part of my human family. I do not see you as evil. I see you as grossly misguided. I ask you to search heart and mind and think about aborting the mission and coming over to our side. We need you. The Earth is suffering. We're all suffering. It's got to end. We are in trouble.

Thank you.

Response Comment H-6:

The Army notes your concerns but they are outside the scope of this EIS.

H-7: Hanalei Fergerstrom.

Aloha kakou.

FACILITATOR GOMES: Aloha.

MR. HANALEI FERGERSTROM: Aloha, Colonel.

To be very frank with you, I haven't had the information at my hands. I have not been able to review it completely although I'm a little bit familiar with it. But I want to talk to you from a point that I am familiar with, and that's the part of this project called the HAMET.

And there is no question in my mind that the military has an objective to continue what they're going to do anyway. What was surprising to me was the responses that was contained in the Final EIS of the HAMET program, and the comment that struck me the most, which should be most concerning to everybody, is that the united States military does not need the permission of the state, and I'm not fabricating this. You can look it up. It's on paper. It's in black and white.

The reason I'm bringing this up is because as involved as I was in the DLNR hearings when they finalized this program, we were giving testimony. We were there all day giving testimony. I've been involved with this program from the very start. But it only became apparent right at the end of this five-

hour meeting that we were addressing something that was not the same thing that the DLNR board members had. They apparently had the fourth and final EIS -- I mean EA, which we, the public, had only been working with up to the third.

Now, it wasn't until the vote was taken and we were leaving the room was it brought to my attention that "Here's the fourth one." That's what they were referring to because I kept on wondering how is it that they're making all these comments about other people's comments? What are they referring to? It just didn't quite dawn on me, and it was quite a setback to understand that the playing wasn't even fair. That's what I'm talking about, the transparency. If I'm on top of this program and I'm working with a third EA and there's a fourth one at the table that we don't even know about and we're testifying on it, there is a problem with the communications, and this is something very important because we're trying to be good neighbors. That's what I thought.

I have some very strong reservations with the military here and very good ones. They may not be agreeable to everybody, but the fact is the Hawai'i Kingdom is a neutral country, and so to have first-rate capabilities from my country is a violation of international law. I'm sure you can say that's a debatable question, and of course this is certainly not the page at which we can ask these questions. But you have to understand that people like myself who have to live with this, who have to work with our kupuna and try to explain to them what is happening, I have to be familiar with it.

Now, this program that we're talking about tonight, I understand there's a the EIS I see on the table here, I have not received my copies yet, and I've addressed that with the public relations people, and that's going to be on its way. But what I'm trying to get across here is that we cannot have intelligent discussion unless we can be clear to each other and have things on the table at a time where we're not pressured to make irrational decisions based on faulty information.

And so once again, you know, I can only say that in order to work easily with each other and get a little more comfortable with what we're doing even though we may have major differences, which I do, and just for the point of consistency, my biggest problem with Pohakuloa is that you are tampering with some of the most sacred spots on Earth.

I brought this up in the HAMET program, and, you know, I don't expect you to necessarily understand, but I expect you to understand that what I'm referring to is first amendment rights. This is my religious rights. These are the two most sacred mountains in the world. You are in the womb of the world, and you are blowing it up, and I have a problem with that. And so you could have all these environmental studies say, "Well, there's no penetration there." well, yeah, if you have a whole bunch of sites that you're already monitoring, how did you think they got there? What I'm trying to say is that there's so much more that needs to meet the eye, and unless we can have transparency and have this information out in the public so we can relate to it, it's never going to work correctly for us.

Thank you very much

Response to Comment H-7:

Thank you for your comment.

H-8: Ms. Moanikeala Akaka.

'Ano 'ai ke aloha. My name is Moanikeala Akaka. I'm a former trustee for the office of Hawaiian Affairs.

A map of our island. Now, what you're proposing is the size of four Kaho'olawes. Four Kaho'olawes. That's the space that Pōhakuloa and the improvements and the expansion that you are referring to will do.

Now, one thing you're supposed to be doing and that you agreed to is that the cultural monitor reports should go from the cultural monitor, who's there every day -- she writes a report -- to you, and

then to the Office of Hawaiian Affairs. To this day, the office of Hawaiian Affairs has not received one cultural monitor report. Either you folks take us Hawaiians cheaply you know, bad enough you're here. You're occupying our islands. You're occupying the middle of this island, Pohakuloa, but the agreements that you have made relating to the cultural monitoring reports, you could give a rip about those getting to the office of Hawaiian Affairs, where you agreed that they will go to.

Well, no wonder you haven't been giving it to them considering the 15th of October's headline story, "PTA plan would Impact the Land" that states, "It will create a significant disturbance to threatened or endangered species and archeological sites." So you say in your Environmental Impact Statement, yet to this day you're not giving those monitoring reports to the office of Hawaiian Affairs. So you're not living up to your agreements just in that small area.

Response 1 to Comment H-8:

The Army does not have an agreement to provide the cultural monitor reports to OHA or any other agency. The SBCT Programmatic Agreement requires the Army to send out draft and final reports about SBCT projects to consulting parties. These reports summarize the observations of the archaeological monitors and cultural monitors during the various projects that have been completed to date. These reports are incorporated into the annual reports submitted to OHA. Please refer to Appendix D of the Final EIS for a copy of the Programmatic Agreement and Appendix G for a copy of the Biological Opinion.

Susan Rice, United Nations ambassador, speaks of the U.S. support for the United Nations Declaration of the Rights of Indigenous people, which include a commitment to not do environmental degradation like you're here doing on Pohakuloa. Indigenous peoples possess additional collective rights, yet you ignore us completely while you're destroying our historical sites up at Pohakuloa.

You know, you're so callous, you know that you feel as the occupiers that you can do anything you want to do. Well, President Eisenhower, when he left office, warned us about the military industrial complex. And as far as HAMET is concerned, my son-in-law is a helicopter pilot. You shouldn't be doing -- go to Colorado. So it costs \$8 million. You know, over in Iraq, wheelbarrows of hundreds of millions of dollars are disappearing. You can use some of that money in order to pay for the \$8 million to go to Colorado for helicopter training.

You know, this is some of the most expensive land in the world, these islands. Yet you military degrade -- "Depleted uranium, oh, it has no effect" ignore, and just take our people, our history, and our culture callously. Yet it says at the United Nations that you're supposed to be taking into consideration that supports, protects, and promotes culture, (unintelligible), resource management, and the environment. But you don't even -- President Obama's appointee has made this statement.

And also the National Historic Preservation Act provides protections to properties with religious and cultural importance to Native Hawaiians as well. But you're not even giving those monitoring reports to the Office of Hawaiian Affairs, where they're supposed to be going.

You know, it's hard to have respect for your institution when you ignore and so callously treat our 'aina, our homeland. You know, we say enough is enough. Don't do any more expansion. Don't build housing for military families that would be better off someplace else.

Response 2 to Comment H-8:

The proposed project is the construction and operation of an IPBC Range within the existing PTA boundaries. The revised EIS does not address the construction of family housing at PTA. The Army is aware of the DU issue and is working with the Nuclear Regulatory Commission. Please see Response 15 to Comment F-2 on cultural resources and Sections 3.10 and 4.10 of the Final EIS.

FACILITATOR GOMES: Kala mai.

MS. MOANIKEALA AKAKA: We had a hearing about 20 years ago -- about 15, 20 years ago here on this island. Over 350 people showed up, and the military was there as well.

FACILITATOR GOMES: Moani, can I ask you to wrap it up?

MS. MOANIKEALA AKAKA: And those people said -- people that have never been involved before remember how it was like here during the Second World War when this place was running with military guys all over the place, pinching the wahines' okole. One of the kupuna got up and said, "You know, enough is enough."

We say no expansion. Do it somewhere else. I mean we still have bombs and munitions floating up on Hapuna Beach. That's how much you've respected us. From the Second World War, we still have many, many sites. Like they say at Waikōloa, it will take 60 years at \$10 million a year to remove what you have left here from the Second World War.

We say enough is enough. We need peace, more peace in this world, not more practice for death and destruction. This country is going down the tubes because money has been spent by the military and not for educating our kids, much less the health of our communities throughout the country.

You know, it's hard to have respect for you, but you had better start handing in those monitoring reports. We're sick and tired of being disregarded and ignored by the U.S. military, who has been here since 1893.

Response 3 to Comment H-8:

These comments are beyond the scope of the EIS.

H-9: Ms. Bunny Smith.

Good evening, everybody.

FACILITATOR GOMES: Aloha.

AUDIENCE MEMBER: Mic, mic.

MS. BUNNY SMITH: Good evening, everybody. Now

I can see you because I have my glasses on. Okay. Thank you. That's fine.

We don't want any further militarization of our island. We don't want expansion and enabling of military battle training. We want a shift to training of forces in peaceful, constructive work, and what I'm talking about is affordable housing for our citizens, infrastructure, roads, bridges, sustainable agriculture, renewable sources of energy, help in cases of natural disaster, programs for mentoring our keiki. I understand that the military in some other countries are moving in this direction. You know the old song, "Let there be peace on Earth. Let it begin with me." Let it begin here in Hawai'i. What I'm talking about is a real shift in the military state of mind. Thank you.

Response 1 to Comment H-9:

The Army has noted your comments.

H-10: Samuel Kaleleiki.

My name is Samuel Kaleleiki. I am a retired marine, retired sergeant major.

I come tonight to tell the military to leave. We don't need any more military. All we need is aloha. We are the only people in the entire universe that spells "aloha" a-l-o-h-a. America spells "aloha" m-o-n-e-y, and that's our problem.

Those of you, if your founding father is paiea, you sit where you're at. If it's George Washington, you go against that wall. You got to know who your founding father is. Paiea is Kamehameha the Great. That's the Kanaka Maoli founding father. George Washington is the U.S. founding father. It is a conflict.

We got these guys over here telling us what we must do, "Kanaka Maoli, you gotta come out of the box." What's happening now with the military here is our fault. Our fault. We allowed them to be here. For what? We feed upon them. Hawai'i is an independent country, independent since 1842, recognized by the Queen of England and the King of France. November 28th of this month is the legal Independence Day for Hawai'i. United States came in and said, "YOU don't celebrate that. You celebrate Thanksgiving."

Excuse me, my brothers and sisters. My kupuna landed right here, not on the Plymouth Rock. My ancestors did not stand on the Plymouth Rock. They landed right here in Hilo. But yet we have someone coming here just like these guys here, "oh, no, there's no depleted uranium up there." Hogwash. I've been a military man. I know exactly what these gentlemen is all about, exactly. So make no bones why the military is here. Divide and conquer.

So now we got this woman passing out these papers here, you know, "You got this much." The United States, a hundred and some-odd years ago, came in, took this away from us. Now we got somebody telling us we got only three minutes. Three minutes.

FACILITATOR GOMES: Four.

MR. SAMUEL KALELEIKI: Four minutes.

You see the hypocritical act that's going on right in front of us as we stand here, this dog-and-pony show that's going on, and this has been happening year after year after year. After 30 years in the United States Marine Corps, I've been retired for 33 and a half years, and this junk is still going on. It's you. It's you, my brothers and sisters of Hawai'i. You got to make the difference.

No. Sit down, lady. I know what the hell is going on.

NO. You got to say, "No. No more." Otherwise, you're going to have the EIS. They have the draft. Two first pages, the draft. It say the "Draft." Third page,

"Final." Hello? I mean you stupid or what?

AUDIENCE MEMBER: We are.

MR. SAMUEL KALELEIKI: Are we stupid, or are we stupid?

You know, before I wake up in the morning I mean after I wake up in the morning, I thank the Lord for giving me this day. At that time I ask him for my tomorrows, the same thing I did in Korea. When a combat journalist came up to me after we hiked down off a hill, he says, "If you had anything to say, what you would say?" "Dear Lord, give me my tomorrow."

I'm 75 years old now. Next month on the 22nd, I'll be 76. He's given me all of that. I've been through all of this. Military, it's time for you to go so that we don't have any problems anymore.

FACILITATOR GOMES: Kala mal, uncle.

MR. SAMUEL KALELEIKI: I'm done.

Response 1 to Comment H-10:

These comments are beyond the scope of the EIS.

H-11: Robert Park.

Aloha, everybody.

THE AUDIENCE (COLLECTIVELY): Aloha.

MR. ROBERT PARK: First of all, I guess thanks for everybody for coming out, whether it be opposition or friendly. I don't know anymore. What I do know is we Hawaiians, we come from a great people. A lot of foreigners, they come from the mainland. They come over here, and they'd like be Hawaiian too. They try to embrace what we call the spirit of aloha, which is love. Christ has brought us that message as well.

The way of the military, it's a dead end. It's a lose-lose. Wherever they go, all that's left behind is devastation, famine, death. But their families somehow seem to survive. They keep pushing on and consume and make consumerism a way of life. A wasteful, wasteful nation and people we can be.

And so being a Hawaiian, Paiea bloodline, we are problem-solvers. America came over here, overthrow us, turned the people upside down and the flag, showing us we're supposed to be in some kind of distress. America is in distress. It's our flag that should be flown upside down, the United States of America flag that needs to be upside down.

The federal agency is an entity that hasn't been audited since 1913, since it was first established. You people have a government, but you have another government printing your money out of thin air. Pay all the banks trillions of dollars and then foreclose on the people. Makes a lot of sense.

What I should be talking about is food security. As Hawaiians, we don't put preservatives and formaldehyde and rocket fuel in things that we consume. It shouldn't be that way, but for some reason it's what's been implemented. I'm not sure if it's from the Nazis or the military. I served in the military. I learned some things about, you know, how great we can be by creating death and then try to build an economy on top of that, on top of a broken monetary system.

What is the plan B for the military? What is the plan B for the indigenous people? Death. Pohakuloa. You like know the results. Kahoolawe. They said Pohakuloa should be (unintelligible) because we live here. So you people are dumbed down, desensitized by your mainstream media, your radio stations. You're indoctrinated into believing the way you're living right now is the way it's supposed to be. I see a bunch of children with no more adult supervision.

Calm down, Robert. Calm down. Calm down.

So what we hear is "Thank you very much." Huh? Kill the livestock. Bring them back when can. Put chlorine, chloride, fluoride in the water. And so we have been robbed of our divine godly rights to sustain ourselves in a righteous way, in a pono way, by which we should be eating all our foods from the ground we stand on. If you're eating your foods from more than a hundred miles from where you live, I guarantee you, you have no clue, idea of what you're eating.

FACILITATOR GOMES: Kala mal, Bobby.

MR. ROBERT PARK: So you grow your own food. It will be healthy for us physically, spiritually.

And so I gotta go, and you guys gotta go. Go with God. Try find love. Try find Christ. Give Christ a chance if you haven't. You know, Joseph Smith. One of the message I've been bringing you besides love, that Christ has brought us the greatest gift, the answer, which is love.

Response 1 to Comment H-11:

These comments are beyond the scope of the EIS.

H-12: "Mike".

Aloha. My name is Mike. You know, sad, sad, sad. How many testimonies? How many positives? Come on. How many years of negatives? Negative, negative, negative, negative. You even get us behind one fake state podium so you guys got us on camera trying to defend our country and our mauka behind a fake state, a fraudulent state, the state that put you guys here and kick our people off our lands? Many, many homeless. My people homeless. My people homeless. Your people who don't even live here, they get home. They get gazillion, billion acres America. I don't know how many they get, but gazillion is a pretty damn close estimate. You ought to go blow up your own people, blow up your mountains.

You guys looking, but I don't know what you guys are going to take out of this meeting because how many meetings you guys heard all the negatives? I don't need repeat all the negatives. I don't need repeat the cultural impact. I don't need repeat that because you guys heard it. Maybe in one ear, out the other, but you guys heard it.

Nice glossy pictures telling us how you guys gonna screw us over some more. Beautiful. "We're going to screw you this way. We're going to screw you that way. Go check it out. we're going to screw you that way too." Imagine we gonna do that to you guys. Imagine I go blow up your home city, your home town, your mountain, the place you go worship, the place you go talk story with Ke Akua, with the divine entities.

You know, so like I said, maybe in one ear, out the other. But in many, many, many, many years, many people been telling you guys, our guys, yeah, showing glossy pictures, telling us how you're gonna to take another step to boot us off our land, boot us off the beaches, and you know, like I said, in one ear, out the other.

And I don't like sound mad. I don't like sound bad, and I don't like you guys look bad. But you know how you guys look. Not too good. You know? So I keep this short because you heard the negatives. I don't need talk to these guys. They know. Your guys, your guys, your people. I don't know if you make the calls. No getting me wrong. You guys might be there just, you know, the galoots, you know. Somebody's in power. I don't know who's the highest rank, but somebody is in power.

And all these negatives you guys gonna hear gonna stay with you guys. You're just gonna drop'em off when you guys pau tonight, paid, go home, shower and blow up the mountain today, tomorrow, tonight. I bet as I speaking right now, they're screwing that mountain over right now. They stay up on Pohakuloa desecrating. I was gonna use some bad words, but that's the truth. That's the truth. Who do they send to us? They never send the people who make the calls, yeah? I mean I don't know if you make the calls or not, but I heard we no can ask questions because the military no need answer us. We're just the brown-skinned people who should live under the ground, you 18 know? We should be (un-translated Hawaiian language). We shouldn't even be human. Human rights, who that belong to? We ain't human according to American military.

So, you know, like I said, I don't like make you guys look bad, but look at yourselves, and might not be your call. Your hands might be tied, you know. You're getting paid by the culprits, the culprits. That's why I not standing over here. I don't want to be associated. "Oh, look, he's talking with the state." No, no, no, no, no, no, no.

My point is, like everybody else said, like in one ear and out the other many, many times before for years and years and years, no military in our islands. Like how I no go to your bathroom and make doo-doo in the sink, you no come to my place and do that, you know.

Pau. Wrap it up. Wrap it up. Wrap it up. (Unintelligible)

Response 1 to Comment H-12:

Thank you for your comment. The Army hopes that the public participation process demonstrates that we listen and that information does not go in one ear and out the other.

H-13: Ms. Liane Corcoran.

Hello. I came here because I saw the article in the paper, and there was a reference to "unmanned vehicle," and I thought, well, what does that mean? Are they talking about drones? Are they going to have drones here?

Now, this disturbed me because I had just listened to a program on "Democracy Now!" and they were talking about the drone situation in Northern Pakistan, and apparently just last week, there was a huge meeting of all the village elders. They call it the Loya Jirga, and they all came together because they were very disturbed at the findings of studies that had been corroborated by multiple sources that since the Bush years, when drones started being used, there have been in just this area in Northern Pakistan, between 2,300 and 3,000 people killed, and at least 175 of these were children.

And these last two children were just killed last week, and one of them was a 16-year-old boy who had been so disturbed seeing his relatives, his friends, people got killed, and it was a very isolated area. He thought he wanted to learn photography so he could actually record, go to villages and record the destruction so that there would be some evidence to present to the world courts.

And so when I found out this is something that is happening here or may be happening here, I find it very disturbing because this whole concept of drones, the Army takes two positions. One, they're self-intelligent. They have designated people that they can target and kill, and then here's the other aspect where there's all these innocent people being killed, and neither of them is acceptable to me because innocent people being killed, well, we all know could be one of our relatives, you know.

And this is part of this high-tech descent into barbarism that we're involved in where now we can go out and one guy -- or who knows who makes these decisions? It's not the people. It's not the courts. These people aren't charged with any crime. We can just decide, "This guy needs to be killed, and we're going to go out and kill this person." This is what world government, our government this is what we're engaged in right now.

So when I talked to some of the fellows here from the military this evening, they said, "well, yeah, we have these things. They're only surveillance drones. They don't have weapons attached to them. That's kind of dangerous to have these things flying around here." well, yes. But just surveillance, that's not such a great thing because this is part of the whole -- the whole sickness that this government is engaged in now where we're all under surveillance and growing. Because why? We are being seen as an enemy. And if they're not bombing us today, they're surveilling us, and they're going to be putting us in jailor something. It's just I don't want this happening on this island. I find it shocking and another addition to all the bad things that everybody else has been mentioning tonight already.

So anyway, thank you.

Response 1 to Comment H-13:

The U.S. Military does not use unmanned aircraft in Hawai'i for surveillance of citizens or for any other non-military use.

H-14: Jerryl G. Kahana Mauhili.

Aloha mal. My name is Jerryl G. Kahana Mauhili. I am a Kanaka Maoli. I am a Hawaiian national. I've come here and taken myself away from the love and affection of my family. I've been in meetings here prior to this meeting on a pre-meeting of what we should be talking about. And I've come to say that earlier this year the Department of Defense approached the Hawaiian community at Keaukaha

to say that they've manifested a new protocol of how they're going to speak to the Native Hawaiian community.

Well, we listened to that as we always have, and our response to that was: Talking to us is one thing. Listening to us is another thing. My mana'o tonight in conjunction with all of the testimony that have taken place is we got about 60 people here. As I asked the registrar, "HOW many people are in attendance?" of the people that have attended, I believe at least 25 percent is military or sharing the military value. So that means that we have a very small percentage of the population base here in the Big Island, which is Moku O Keawe, to come in here and testify.

So, again, my mana'o tonight is what we spoke about earlier this evening, is we can continue to give our mana'o. The problem is we wonder about who's listening. And when we talk about who's listening, what kind of response will we receive? So to hear but not to respond is really a waste of my time and my family's awareness of where I'm at tonight.

But I came here because we had an election of sovereignty and of how we, as elected officials, need to represent our grassroots people, the Kanaka Maoli.

(Applause.)

MR. JERRY MAUHILI: Now, I appreciate the applause, but at the same point, I'm not here trying to get glory. I made a decision to stand before the camera and the audience to simply say this: Is there trust in our (un-translated Hawaiian language)? And the answer precluding this meeting was there wasn't much trust in what is happening this evening.

So as I am right now going to be instructed to wrap it up, I say it with dignity: Mahalo, mahalo, mahalo. The Hawaiian style is to say "mahalo," but we know that we get "a'ole." so, again, I say mahalo, but I walk home tonight saying proudly that I have made a stand, and I have voiced my concern.

Aloha.

Response 1 to Comment H-14:

Thank you for your comment. The Army hopes that the EIS process has opened the lines of communication and improved sensitivity and understanding between the Army and our neighbors.

H-15: Edwin Miranda.

Give me ten seconds (unintelligible). First guy coming up, okay? Ten seconds. Count ten seconds now.

Brah, you guys should stop blowing up the mountain or something like that. That's my ten-second thing. Okay?

Second thing I want to address now is probably regarding to this thing. You know, I don't know how you guys determine that uranium has no significant impact. I don't know whoever did the evaluation sheet or if you guys (unintelligible) assessment sheet, but you guys better start looking through the manual and figure out how you should be writing this thing.

The other one too is like, you know, it's kind of neat over there. You read on one of the boards like that, especially on endangered species and (unintelligible) so, you know, part of the things about the (unintelligible) archeological sites, all of the environmental things they should (unintelligible). And there's a good one over there, you know, in regards to the endangered species.

AUDIENCE MEMBER: Talk in the mic, brah.

MR. EDWIN MIRANDA: Oh. In regards to the endangered species, plants that you have over there, you know, I read one of the things. It says like, you know, the area that they looking at, the alternative area for their kind of training, does not offer the environmental conditions for them to flourish.

Well, I kind of wonder. Why? Because there are endangered species over there where, you know, you got things coming on top of you, explosions, bullets, things like that. I don't know if anybody can live in those kind of conditions, even a plant like that.

Response 1 to Comment H-15:

Please see the response to Comment F-1. The Biological Opinion is included in Appendix G.

So, you know, when I have seen anything that has a significant impact, you know, that really doesn't sit too well with the environment. Okay? Because, you know, you cannot just cancel out that piece and that maybe 15 other ones that doesn't have a really major significance as this one, you know? You know, we need to understand the watershed principle, you know, in regards to these things, you know. Nobody has even addressed, you know, what the potentiality of leaching into the kai, you know, our potential aquifers that occur down side, you know? None of that is -- you know, anything with uranium, being a submariner like that, being on a nuclear sub, you know, uranium, you know, radiation really clicks on in me. Okay?

Another thing too, you know decisions to be made on top here. You know, the Army's decision being that "we will consider," you know, that sounds like weak language to me, you know. It should be a little bit stronger so that way it puts more accountability on you guys to really come up with a good decision and meet with the people like that. Make sure that decision is made in the proper way. So please consider that. It should be, you know, at least addressed and resolved. But, you know, to say like, "oh, we'll consider it" is just like "I'll read'em when I get the chance." That's what it's basically saying to us in layman terms. Okay?

Thank you.

Response 2 to Comment H-15:

The lack of surface or groundwater greatly reduces the probability of contaminant migration in both the Cantonment Area and Range Area. The conclusions of an ORAP assessment of PTA conducted in 2010 (discussed in detail in Section 3.8) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the Range Areas and within the impact area at PTA. Uranium is not very soluble and does not migrate in groundwater. In addition, the groundwater table below PTA is at least 3,000 to 7,000 ft.

H-16: Patrick Kahawaiola.

My name is Kahawaiola, Patrick, L.A., 6616059, United States Navy, petty officer second class, signal Corps, SM2.

I've heard many of my brothers and sisters talk tonight to the military that they were also veterans. I honor them. But 48 years ago I enlisted in the United States Navy at the age of 17. I thought I was going to do something for your country. I got out of the worst war, two tours of duty in Vietnam. Your 00-214 acknowledges I was honorably discharged. It also acknowledges I am authorized by the Department of Defense to wear three medals. Two years of active duty, four years of inactive duty to serve my six years obligated service to your country, the United States of America. The medals were the National Defense Medal, the Vietnam campaign Medal, and the Vietnam service Medal with a bronze star, which meant I had two tours of duty in Vietnam.

I did not go into what was then called -- is now called "in country" because you need to step on terra firma to be in country. I served in the Navy. You can only be authorized in the Navy to wear the Vietnam service Medal with a bronze star in this case if the ship that you was on was actively involved in combat, in support of combat units on the shore. A 68-day deployment. That's my biggest deployment, 68 days at sea. Reminded now, I'm 17 years old. First time I've left Hawai'i. Found out that all the bombs excuse me -- all the ordnance that we were shooting was to kill people. It wasn't just to scare them, but it

was to kill people in support of ground troops. We had a (unintelligible) officer call in the coordinates. We shot. Did that for two tours.

Forty-eight years later, a year ago, I am diagnosed by the veteran's Administration to have PTSD, but no records can be found that I was in combat. No records can be found I had treatment. I was never treated for PTSD because 46 years ago when they let me go, they just said, "Goodbye. Are you going to reenlist?" "No." "Goodbye. Go back to Hawai'i."

The point I'm trying to make is today the voices that you've heard, some hurling barbs at those of you in military service, these voices are passionate for the military to clean up unexploded ordnance, unexploded or exploded DU. These same voices speak to malama, take care the 'aina, the (unintelligible), the sites of cultural resources, the spiritual part of our culture. The same voices can be heard imploring you to follow agreements made between the parties. The same voices can be heard saying, "DO not destroy our historical cultural sites. Beware of the environment, the degradation of our resources, our 'aina." You are here illegally. You are occupiers. The U.S. apologized for the overthrow of the Hawaiian Kingdom. No more militarization of (unintelligible) Hawai'i.

So I say to you my service 48 years ago should allow everyone here tonight to say and speak what they said because I did this so that you all can be where you're at in this time when America was in its worst war. When I returned, I was spat upon. I was called a baby killer. I've never made this known in 48 years because people just don't believe I served. I don't really care, but tonight I needed to raise that concern to you.

So I implore you, the military, if nothing else, at least get it in your books that the record was set, that we came tonight to say, "Stop what you're doing or at least involve the people."

And I think one speaker spoke tonight, "Let's find a way to love, peace," because that's what Ke Akua wants us to do. However, failing that, may the great ones bless you for who you are.

Thank you.

Response 1 to H-16:

The Army hopes that the EIS process has opened the lines of communication and improved sensitivity and understanding between the Army and our neighbors.

H-17: Mahalo, Uncle.

Is there any more testimony?

Okay. I just want to remind folks that this is part of a process that in accordance with NEPA, the National Environmental Protection Agency, that there were requests for comments in a Draft programmatic EIS being asked for.

The document IS available for review, and that information again is on this paper that is at the back of the room. There's a website. You can get the documents too, and they're available at the Hilo Public Library here and at Kailua-Kona, the Thelma Parker Library in Kamuela, and the Hawai'i State Library on Oahu in Honolulu. So those Draft EIS -- the PEIS is available at those places. But do pick up this form back there if you have any more -- I mean if you want any more information about where to get the document as well as the notification about the deadline for comments and where you can submit them.

Okay?

Uncle, did you have a --

AUDIENCE MEMBER: yeah. I just like know what's gonna happen to this? We want to follow up with this with you. What's going to happen now?

FACILITATOR GOMES: It's the gathering of the information. The process -- there's a chart back there that has the process. One, two, three, the third chart over there has a kind of diagram that explains the process of this.

Rick, would you explain.

MR. RICK WILLIAMS: I'll follow up.

FACILITATOR GOMES: okay.

AUDIENCE MEMBER: Excuse me. Is the hard copies only going to libraries? Is that what you read?

FACILITATOR GOMES: Rick?

MR. RICK WILLIAMS: I'm sorry. There were a few people that attended our scoping meetings that asked for hard copies. We mailed those people hard copies. There were some others that asked for CDs, and we mailed those CDs. If you'd like a hard copy or a CD of the Final EIS where it considers the comments we heard tonight and throughout the scoping period, just let one of us know and/or provide a comment. We'll make sure you get it.

AUDIENCE MEMBER: I think all of us like know what's gonna happen. What's the result of these meetings? We come over here and give you our mana'o. You guys presented something, and we no like what we see.

FACILITATOR GOMES: uncle, after this meeting, you can go and talk to him about that, and he'll explain that a little bit more to you and explain more to you about what the process is.

AUDIENCE MEMBER: well, I think there's more than me that wants to know.

FACILITATOR GOMES: yeah.

AUDIENCE MEMBER: I'm sure of that.

Response 1 to H-17:

The Army hopes that the EIS process has opened the lines of communication and improved sensitivity and understanding between the Army and our neighbors.

3.7.2 November 9 Public Hearing

H-18: Isaac Harp.

Hello everybody. My name is Isaac Harp. I live up here in Waimea. And, you know, I think everything in the document that was put together is irrelevant, except for Chapter 3, page 3-104, Section 3.10.3.3. Native Hawai'i (unintelligible).

It states that Hawai'i became a territory in 1898. That is false. There was never a treaty between our Hawaiian Kingdom and the United States of America. In addition, congress had no authority to annex another country against the will of the people.

The petition signed by the majority of the Hawaiian Kingdom. Subjects are against annexation. They're against annexation; therefore, Hawai'i never became a territory of the United States.

In that same section it also states that Hawai'i became the 50th state of the US in 1959. That is also false. The state process was illegitimate due to one simple fact. There was a lack of options on the state ballot that legitimized the process in itself. In addition to that, the process was invaded by American citizens. Twice in the process.

And a lot of military guys in Hawai'i have been taken by US executive order. US executive orders do not apply in foreign countries. Congress has no authority; the president had no authority to issue executive orders to take lands of our countries.

The military presence boils down to, in Hawai'i, terrorism against friendly and neutral nations. There's no treaty with the United States.

Response 1 to H-18:

Without getting into the details of how Hawai'i became a State, we should note that Congress passed a resolution in 1993 offering an apology for the overthrow of the Kingdom of Hawai'i. See Section 3.10.3.3.

The United States military has contaminated Hawai'i with unexploded ordnance, depleted uranium, chemical antibiotic weapons. And military continually wants to expand its footprint in Hawai'i. We expect the military to do the honorable thing. Time to clean up your mess and go home.

If your mother's ever taught you manners, you would know, you clean up your mess 7 not leave your mess and go someplace else and make more mess. Not easy for people like myself to come over here to speak this way. We usually like to be friendly and Aloha-type people. What's going on is killing Aloha. There's hardly any Aloha left in Hawai'i.

What else can I say? Prove to me that it's legal. The executive order is taking Hawai'i lands, that there is a Treaty of Annexation. I want to see that Treaty of Annexation. If there's no marriage certificate, there is no marriage.

And there's a violation of international law to be destroying lands of an occupied nation, which Hawai'i is. We're a nation under a military occupation. And what we're going through is a very traumatic life experience. Our entire lives we've got to go through this stuff. We never have a break. We're always on the defense. You're robbing us of our environmental life.

Regardless of the last time I was speaking with the military, even if a hundred percent of the people are opposed to it, go ahead with it anyway. What's the sense of you holding these hearings or public meetings or whatever you want to call them? Just a formality. To say you went through a process.

But it still boils down to United States having no lawful authority here in Hawai'i. Anyway, I thank you for your time.

Response 2 to H-18:

These comments are beyond the scope of the EIS.

H-19: Kihei Soli Niheu.

Aloha. (Un-translated Hawaiian language.)

I just want to thank Ku 'wneaaloha for saying that little pule, because it kind of calmed me down and I'll try not to be obstructive.

After saying that, I just want to point out two things. That the united States of America and its de facto governments are telling us that kanaka mauoli, the people of these islands, can rely on two instruments in which to address their problems.

The first one is called the Declaration of Human Rights, which was ratified by united States in, I believe, 58 countries in which it gives people, no matter what color, no matter what station in life that you have, that you have certain rights. And one of these rights is the Article 17 which states no one shall be arbitrarily deprived of his property.

So being that the United States signed the declaration in 1948, they haven't quite followed that Article 17.2.

The second fairytale that the United States is trying to impress the world is that they pass, they are now in support of the Declaration of Indigenous Rights, Declaration of Indigenous People's Rights.

And in that document it quotes or tries to redefine what the citizen's rights are. And they have, I don't know, 30-something articles, all of it which is a facade to be promoted among the world that here in Hawai'i, the kanaka mauoli have those rights.

What we know, that like everything else, the united States legislates to protect the rights of the poor, protect the rights of the first peoples is all a lie. Just go look at the Indian law. You can see that thousands and thousands of fields that they have violated. And in Hawai'i, it's no exception.

And in one of the things of the Declaration of Indigenous Rights, as stated. By the Ambassador to the UN, Suzanne Rice, when she said, the United States intends - - intends to continue to consult and cooperate in good faith with native Hawaiians.

When she said in good faith, it's very unclear what she means, in good faith. To me, in good faith, especially on this particular issue, on the military in Hawai'i, to me good faith - - to me good faith means, clean up all your kukai.

You guys, everywhere you went you destroyed our -- you went to Kauai, Oahu, of course, Kaho'olawe, this island. There's no such thing as good faith, as I understand it to be.

Until you can show this good faith, all your rhetoric, all your Aloha is full of kukai. You are like what the Inikini of North America; you speak with a forked tongue. And here in Hawai'i you continue you continue to destroy our islands; you continue to destroy our faith in regards to your military operations.

And there will come a time that you will have to answer to your maker. And in closing --oh. Here goes. I have another one of those "wrap it up." I don't have -- like I said last night, I don't have my (unintelligible), so I can't wrap it up.

So in closing, I would just like to remind not only the military, but to all those kanaka mauolies who are continuing to allow this facade of Aloha by the occupiers of this country saying that they will help kanaka mauoli. They will help the people of Hawai'i.

But the fact still remains, the United States Government and all its economic policies are causing us to become slaves of the economic system. As we will witness in the next -- this week, the events happening in Honolulu at the APEC. And they, themselves, will show what their real intent is. Not only kanaka mauoli, not only the people of Hawai'i, but with people of the world.

United States of America is leading the way to destruction of the world as we now know it. And there will come a time where all of you that are sucking the royal butts of Wall Street will have to answer.

In closing, that's it. Thank you. And once again, I'd like to ask the military to start showing good faith. Thank you.

Response 1 to H-19:

These comments are beyond the scope of the EIS.

H-20: Lee Ballard.

I'm just here to voice my opposition to any military expansion or growth on this island.

And I would like to point out to everybody how many federal employees are here today trying to convince us today that this is a good thing, but yet I don't see anybody here being paid to represent us to help us support our imposition to this.

I think the military has been proven to be a poor steward of the land to the state of Hawai'i. We are already the most militarized state in the union and I think. Enough is enough. I don't see how --

THE SPECTATOR: Can you speak up a little?

LEE BALLARD: See how any modernization or growth up there is going to benefit anybody.

I'm here to oppose any growth or military expansion here in Hawai'i. I'd like to point out how many federal employees are here tonight to try to shove this down our throat. Not one person is here being paid to support us and to stand up for our rights. And I'd also like to point out what a bad steward the military has been in the State of Hawai'i.

As a point of fact, they are still yet to clean up their mess here from World War II. So I don't see how any federal environmental impact report is going to convince the people of Hawai'i different. Thank you.

Response 1 to H-20:

These comments are beyond the scope of the EIS.

H-21: Robert Green.

We've got some people talking about their roots in Hawai'i. Well, let me kind of give you background on my roots in Hawai'i.

My grandmother was born in La Puna Hoi in 1890. Her parents migrated from the Hilo as a direct, from invitation from King Kalakaua. My mother was born in Waimea. I was born in Hilo, 1935, lived in Puna, and now I live in Waikaloa.

I consider myself a Hawaiian story. I know a lot of research on Hawai'i. I've been trying to limit my research from Kailua in 300 when he landed at Keauhou to Liliuokalani when she was exposed.

But what's been happening lately is people have been speaking against what they consider a bad faith of the United States. And I'm -- I would love to discuss that history with you and do that period.

But I'd like to make a quote from David Malo. You know David Malo. Well, he mentioned the fact that when he lived, he didn't even own the malo that he wore. He owned the clothes you wear right now.

Now, what I am is I am for the expansion. I am for the support of the military. I think they did a wonderful job. I was here during the war when they had a camp in Waimea. I was in Pahoa when they put a machine gun next to my father's front porch.

I have been in the military. I've served in the military. I support the military. And I think, especially this area, you know, I used to fly in the Air Force. And in certain areas, or most of the time, we land in long runways in level wide spaces.

In certain other areas, we landed in short runways at high attitudes. And these were a challenge to the individuals without training. So what we have and what we need here in Waikaloa is same high altitude training for our pilots.

So this is a vital -- I think it's vital to the islands. I think this is vital to the nation. And I would like to see more military presence. I realize that we don't like the military, but we want their money to build the Saddle Road because it's convenient for us. I kind of think that what we need to do is look back as Americans. As I said, I will talk history with you, but look back as Americans. I'll discuss all the happenings at the time that she was disposed and the reasons why. And I'll go back into the annexation, too. I'd like to thank you all very much for putting up with me. Again, I am in support of military and I'm in support of Waikaloa. Thank you very much and I appreciate your efforts with the environment.

Response 1 to H-21:

Thank you for your comments.

H-22: Jojo Tanimoto.

My name is Jojo Tanimoto and I live in Kawaihae in the Hawaiian Homelands. And the purpose of my being here is I'd like to echo what Uncle Soli Niheu said about good faith. Working with military, it's my experience that they are great neighbors, they're really nice people, and they're open to talking with the community.

In my experience, that has changed a lot in the last 30 years. I came from Kalihi next to Ft. Shafter. So, Ft. Shafter is my home. I'm a little bit of military life. Married an Army guy. He worked up at Pohakuloa, and they used to live in the tents. So I got that generational background. So it's not really like I'm against the military.

I have a problem, though. Number one, we had a meeting in Kawaihae and the speaker happened to be the deputy director, Department of Water Supply. And according to the EIS, you guys are hauling from - - and historically, you have hauled water from Waimea. And it says that you folks are in contact with the Department of Water Supply, but it's not what they say.

Response 1 to H-22:

The Proposed Action is the construction and operation of an IPBC Range at PTA. Therefore, the Army does not think water consumption will increase at PTA. Also, the Army does not propose to supply water from PTA. The University of Hawai'i plans to drill a test well in the Saddle Region near PTA. As reported in Section 3.16.3.2, the daily usage of water consumption at PTA is less than the recharge capability.

They have no data. Nobody has contacted them. And so water is being issued for some Kohala. The availability and the capabilities are not the same as when the military first came. Neither are they the same for Pohakuloa. And where I come from is Kawaihae. So I guess I have both sides of the picture at issue tonight with good faith.

I would suggest, and I will put myself out there, because I'm going to suggest that you guys find someplace else to get your water. Maybe Kaumana on the Hilo side. Maybe when the Marines come up with something, you guys can go out there.

Or the top of Auwana, you also have the spigot out there. So I would suggest that you guys go back to the watering problem. And it's unfair and it is kind of like there's no good faith.

How do you trust the military if they tell us in writing they did something, and yet the people from the department said nobody came? And it's not written in the EIS that they responded to anything because they don't have data to respond to. So that would be number one.

Number two is Kawaihae Road. It's written in the EIS, Kawaihae Road, Waimea, Kawaihae Road runs down to the Harbor. When the military first got down to Kawaihae there was hardly any population. Today it's a harbor environment. And you have to compete with the cargo trucks, huge trucks, traffic on Kawaihae Road.

But the EIS does not address that cumulative because you guys, no matter how you get to Pohakuloa, you have to come to manalo, you have to fly past our house. And you have to use Kawaihae Road. But Kawaihae, where is it in the EIS? How do we keep good faith with nice people? Cannot. Because we're not included in your picture.

The other thing that is in your -- yeah. Yeah. I saw that. The communities on the Hilo side and this side already have a problem. There is no funding to mediate the problem. They've been trying for the last 30 years.

And I think it's important that we get some funding to help the county to accommodate their solid waste or they came back to Honolulu. But you guys, the community is overwhelming the landfill on two sides of the island.

We would also like to address, because I came from Kawaihae, you guys have the harbor. I did have a meeting with military yesterday. A very nice meeting, I've got to tell you guys. They are willing to try to avoid the trench between Honokoa and Kai Opua Point. Weather conditions, whales, whatever the impacts are exception to the rule.

But they are willing to avoid it. They have always avoided it. It's just in the last year they decided they own the road. And so we would like to have that addressed, which we did yesterday.

And I know you're trying to move me along, but I think I have important issues that I need to bring up. But I will close here and submit this. But thank you very much for being good neighbors.

Response 2 to H-22:

Please remember that the Proposed Action has been revised to the construction and operation of an IPBC, and will not increase traffic to Kawaihae Harbor. Training iterations to PTA will be based on training strategy, evolving doctrine, and operational needs.

H-23: Mark McNett.

Please bear with me. It will be a wide shot. It won't be zooming in, out of deference of each and every one of you.

And I've noticed that it's a little bit hard to hear. You know, I'd like to shut this right off, if I may. I can be heard without it. May I shut it off? Because it's just too echoey with the PA system.

FACILITATOR GOMES: Excuse me. Can you stand back here?

MARK McNETT: Certainly, but it's going to be a problem. All right.

In my four minutes of time, which I start over right now, it's true the Kingdom of Hawai'i was overthrown in a land grab. And the land grabs still go on today illegally by our County Public Access Open Space and Natural Resources Commission and Land Fund.

Now, I did make a few brief notes, and I typically take a motor count and then I take a headcount. And what we've got right now is similar at 8:00 o'clock, is similar to what we had at 6:30. Thirty-four vehicles parked outside of this building. Forty-four people in here.

Subtract one for me, two for the kids, they did not drive here, that's 41 people it took 34 motor vehicles to get here.

Yeah, it's true. The US military is the biggest consumer of petroleum products. And why? To keep all the people that drove here and everybody else comfortably in a driver's seat behind a steering wheel pressing down on the accelerator pedal. Okay?

Another fact, breathing, lung, and pulmonary diseases in children increased in proximity to highways and roadways. Fact. Proven scientific medical fact. Your car culture, which, along with the drug culture, are now the predominant cultures.

All the other cultures are subcultures, including the native (unintelligible) culture. In that big spectrum that we have here in Hawaii, no majority. You know, it's getting close to 25 percent white and 25 percent Japanese, but everybody else, they're subcultures.

The car culture, the drug culture is the mainstream culture. Now, this gets a little personal. I've got two nephews from back in New York with (unintelligible). And they're going back, one for the fifth tour. They've both been to Iraq and Afghanistan to keep people driving and keep gas prices barely affordable.

Yeah, fifth tour and sixth tour coming up. And the bone of my bone, blood of my blood, flesh of my flesh, that means something to me. You know? And all these other people that have come back in boxes and been misplaced. And we weren't even allowed to see it at first.

You know, I'm coming up on three minutes. I don't know if I can stand another minute of looking at you people. Nothing personal.

But for the 108th Congress of the United States and 109th Congress of the United States, I was among the top go-getters. First of 38 candidates coming up to Ed Gates. Now held going for the senate.

For the 109th Congress, also among the top go-getters. Zero cash in, zero cash out, zero campaign budget. Not low budget, no budget. Top peace candidate. Top sovereignty candidate. Top environmental candidate.

Now, to be fair, I saw (unintelligible) that Tom Cannon was candidate. But I was never held to a speaker in all the years of peace rallies. And I had to negotiate just to get on an open mic and further negotiate just to be the first one on an open mic. So all these -- that's my four minutes. I'd better shut up. Thank you.

Response 1 to H-23:

These comments are beyond the scope of the EIS.

H-24: Peter Berezney.

Hello. That's too loud, isn't it? My name is Peter. I'm going to be a game show host here. Okay. I've got to adjust it to my height.

I wanted to talk because I heard some other people talk this evening that said some things I strongly agree with. And I thank all of them for saying it. So I tried to make some notes.

I'm not much of a public speaker, but I guess the bottom line is that we don't want the military here. That's what most of us showed up here tonight. And there's a lot of good reasons for that.

And I haven't heard any good reasons why they should be here. I don't know any good reasons why the military should be here in Hawai'i. There was a meeting in Waikalua at the cafeteria there about nine months to a year ago and I asked a gentleman there, I don't have his name, he was in the Marines. And he told me that the reason they're doing it here, meaning this expansion on Pohakuloa, instead of somebody else's back yard, is that there's a strategic reason to have them here.

And that, to me, is another idea of more reasons for the military presence not to be here. There just seems to be an endless supply of reasons why they should not be here and why their presence here should not grow. Cultural, environmental, the culture today, historic reasons.

There's a gentleman up here who I did disagree with. I don't want to point him out. Oh, there he is in the back. I disagreed with you. You said things about history that you know and it sounds incredible. But I would like to hear the history of someone who lived in Kaneohe before the military presence grew there. What was Kaneohe like then? And what would it be like then?

I guess to sum it up, that's the thing. This is an antigrowth sentiment. The military comes, you're talking growth, growth, growth. And the last gentleman who spoke, he was a hard act to follow but essentially, there's same truth in it. More people, more cars, more roads, less Aloha. I've said enough. Thank you.

Response 1 to H-24:

These comments are beyond the scope of the EIS.

H-25: Sherm Warner.

Hi. Sherm Warner. I'm from Waimea and was moved to testify when I saw the picture on the front page of West Hawai'i Today.

A couple days ago it showed some soldiers in training. Said they were training to learn to fight in buildings. And that the orange tape marks on the ground indicated where a hallway would be. And it seemed to me that that was ridiculous.

I spent 35 years working in professional theater. We put tape marks on the floor for actors, for playacting. If there's a proposal to improve these facilities so that they meet the demands of what these soldiers are doing, I'm in favor of it.

I may not be in favor of these wars. Frankly, if you want to go to (unintelligible) meeting, you may come to my house. But as long as people are going, they should be trained well and at adequate facilities.

In the '60s I served in Hawai'i National Guard, 29th Brigade. On May 13th of 1968 we were activated for service in Vietnam. And at that time, unlike today, they didn't send the 29th Brigade as a unit, they just sent us to Schofield. And every morning they read off a couple of names and those people were going to go to Vietnam in a couple of days.

And I still remember when my first sergeant, first sergeant of the National Guard at that time – I don't know if it's true today, it was a State of Hawai'i civil service job. I had more time in the active duty Army than he had. And his number came up. I believe it's three months before he was going to retire.

I went to his going-away party and he took me out in his dark back yard off into a corner and told me that he was very afraid. But he wasn't afraid for himself, he was afraid when he got to Vietnam he'd be assigned to a combat company and he wouldn't know what he was doing. And there were people who would depend on him for their lives and he was not well trained.

And I've always remembered that. I went to Washington once after the Vietnam Memorial was installed and looked for his name just to make sure that he wasn't there. But it always remained with me no matter how opposed I am to these wars, no matter what my political beliefs are.

If they're going to go, then they should be trained as well as possible for that duty. Thank you.

Response 1 to H-25:

Thank you for your comments.

H-26: Margaret Wile.

I'm Margaret Wile, Waimea. And I just want to talk a minute about balance and really trying to have all the different concerns on the table at the same time.

And I do have same concerns, but at the same time I want to say that I feel that all of us really agree on one level with what Bob Green said and Sherm said, is that we all care about the safety of our youth and certainly are not blind or uncaring about their safety.

So -- but at the same time, I think it's important that we look at the big picture and what you all are really doing and why we're involved in the military or why we're -- what the whole purpose of the big picture mission, sort of making for a safe and peaceful planet.

And the military really is just one of the tools to do that. Other tools are negotiation, other tools are conversations between youth, other tools are bringing people together for wellness and spas. How do we get connectivity?

So I guess it's just the island of Hawai'i. Ideally, I would think this is where we want to be pursuing peace and that the funds and energy would be available for, whether it's a camp for people, kids from Afghanistan or kids from US; and how do we all learn to live together?

And one thing I find is that often where there are different tools, the ones that are -- you're better at are the ones that you can use. So a surgeon will treat someone and feel you need surgery and an acupuncturist feel you need acupuncture.

So here we are strengthening our military which involves our youth killing other youths, whether it's in Afghanistan or someplace else. We should be, in my mind, it may be, quote/unquote, necessary, but it should be, how do we increase all those other missions and how do we make Hawai'i a place that's also for peace?

And stepping back from that, you take a look at our planet and how endangered our planet is and how at risk the environment is, and you take a look at the tsunami s and floods in Bangkok, Honolulu, is just so many feet away from that same thing.

That suddenly a big tsunami's coming and you've got the Afghan soldiers and you're standing there, you help each other get out of this. So I think trying to put that bigger picture framework together, here we are, we're building up to the military. And as I understand it right now, this EIS is really just building up the facilities for the current soldiers.

But my guess is the next EIS is how we're going to now bring it, whether it's soldiers from Okinawa or from Guam or from wherever, and we're really just going to be step by step, tier by tier, increasing the military.

So I would love, let's say, what are we doing that's focused on peace? How could we also do what I think that Aloha and Hawai'i can do to make for a better world?

Those aren't really answers, but I do think that, uh, it's important to see that what we're -- the tool that we're strengthening is the tool that really should be at the bottom of the (unintelligible).

Response 1 to H-26:

Thank you for your comment.

H-27: Kihei Soli Niheu.

I'd like to address my remarks to those -- to those who were pro military.

First of all, let me give you a little bit of my background. I was from small baby kine, I was trained to be a pro military. I went to the West Point of the Pacific, place called Kamehameha School. And that curriculum were about all the things about military. And one of the things that I wanted to do was to go to West Point.

My dad was a first sergeant in Hawai'i National Guard headquarters, headquarters stationed at Ft. Ruger. I don't know, that guy talked about National Guard, he might have known my dad. And my dad was perhaps the most gung-ho GI that existed here in Hawaii.

So as I was growing up, I inherited same of that tenacity. America, right or wrong. But anyway, I got accepted to West Point in 19- -- 1960. Unfortunately, I was arrested and put on court martial. And as consequence, I wasn't able to go to West Point.

For that, I was lucky. Because if it wasn't for that arrest for drunken driving, which I never drank in my life, I would be coming home in a box, too.

And fortunately, I had the opportunity to go and attend Institution of the (unintelligible) in California. And while there I learned that war is not the answer to solve the problems that face mankind. Only through peace and love can we reinstitute the wealth of the world so there would be no reason to have wars.

Wars is a terrible thing. Wars is - - only really puts a burden on those who want the war social economic standards. Why doesn't the Wall street bankers go to war, too? Why doesn't their children go to

war? Why doesn't their children carry? Why doesn't their children be affected by agent orange? Because the Wall Street bankers, they know that war is not good for their families.

So when I hear people praising the military, praising the need to kill fellow man, I'm wondering, where did he obtain that knowledge? Why is it that you want to constantly -- military wants to constantly to kill, kill, kill? Why does the military have all these weapons of mass destruction? They can kill the world over 200 times.

And I think, with those who support the military, I think you've got to take another look and why war is not good for all living things, be it humans, be it plants, be it animals.

And I think all of us have to follow in their footsteps of security to this Mahatma Gandhi, Martin Luther King, and Sister Teresa. So with that in mind, I'd just like to close by thanking my aumākua for showing me the way.

Showing me the way that war is not good for you. It's not good for the children. It IS not good for your grandchildren. Not good for those several generations down the road.

We might not be able to stop all the wars, but let's make one effort to stop at least one war. Thank you.

Response 1 to H-27:

These comments are beyond the scope of the EIS.

H-28: Isaac Harp.

Isaac Harp. Interesting, Margaret, what you were saying about same sort of peace type of training in Hawai'i would be more appropriate than learning how to kill people. And I really support that idea.

And I was also thinking about the amount of money that's being spent on modernization, modern weapons and everything. And I think it would be a lot more cost efficient, for example, if you go to Afghanistan and throw 10,000 bucks at the guy's foot instead of throwing a \$10,000 bomb on them. He might become an ally instead of a dead former enemy.

Response 1 to H-28:

These comments are beyond the scope of the EIS.

And back in the '60s sometime, one of the United States presidents said, beware of the military industrial complex. That's what's driving the whole thing. Its weapons manufacturers making billions of dollars and so-called providing employment opportunities for Americans.

I think it would be a lot more effective if we help feed the people, give them medication and things rather than dropping bombs on them and stuff like that.

When you're fighting with this long distance type of technology, you don't know who you're killing, really. You're far separated. The guys are playing not -- yeah. They're pretty much playing, like, Nintendo games.

They have a remote control and things like that that go way - - kill people in distant areas and stuff like that. Something's wrong with that. Where's the humanness in killing somebody with remote controls and cameras and things?

I wish the military in Hawaii, if you guys have got to stay here, change from killing-type training here to conflict resolution, peaceful conflict resolution. You want to kill somebody, kill the politicians that are sending everybody over there to get killed. The lobbyists in DC, putting money in all these guys' pockets to buy all these military weapons; a Stealth bomber, over \$2 billion. You don't kill people for the oil. We kill them by the oil with that money.

And I was wondering, what other locations have you considered for this type of activity besides here in Hawaii? Any other military bases being considered? I know there's a lot more open land in the United States than there is here in Hawaii.

Response 2 to H-28:

With the current and projected reductions in DoD budgets, movement of Soldiers and their equipment between mainland installations and their Hawaiian home station would be financially and logistically unreasonable. The financial management at all levels of DoD is to adequately resource commands to execute directed missions in support of national interests. Inherent in the execution of that mission is the legal, ethical and cost-effective use of financial resources by all commanders and their financial/resource managers. Visibility, accountability, transparency, oversight, and controls are required for all contingency operations dollars (HQDA, Army Financial Management Guidance in Support of Contingency Operations, 09Feb11). Additional guidance on fiscal austerity was issued in 2013.

Note that Section 2.3 of the EIS states that ranges at locations outside of PTA do not meet the Purpose and Need of the action. Soldiers would be required to stay 30 plus days per rotation or longer to make CONUS deployments economically feasible. This is the length of deployment to Fort Irwin, California. According to Chapter 1.3.1, deployments to PTA could also last up to 30 days. Family members do not travel to either place. The real difference between Fort Irwin and PTA is the cost of travel for personnel and equipment; a rotation to Fort Irwin is much more expensive. Fort Irwin is limited to exercises for full BCTs and can only support 10 such exercises each year. Fort Irwin also serves the entire Army. By contrast, PTA can host battalion size exercises.

And I'm concerned about the continued military activity in the high elevation area of the Saddle Road, the Saddle area. A lot of the stuff you explained is heavy metal. And the stuff eventually gets down into the groundwater and poisoning the people here. Learn how to go someplace else and kill more people. Something's wrong with that picture. It just doesn't add up.

Response 3 to H-28:

The lack of surface or groundwater greatly reduces the probability of contaminant migration in both the Cantonment Area and Range Area at PTA. Groundwater is at least 3,000 feet below. The conclusions of an ORAP assessment of PTA conducted in 2010 (discussed in detail in Section 3.8) found that migration pathways that contaminants would use to leave the range area do not exist at PTA. As a result, potential contaminants are generally confined to the range areas and within the impact area at PTA.

I would support the military activity here if it was for activities such as search and rescue, medical EVAC, things like that. You need that type of training.

And contaminating our drinking water, I don't think that's such a good idea for the people here. But if you're training to provide aid to the injured and things like that, I think the people here would support something like that, not contaminating our environment or our bodies.

I don't know if you ever followed the depleted uranium out there, the petition of regulatory commission for that, along with three other people they found that none of it had standing. So a pursued enforcement action which only resulted in an order of violation to the Army.

And I also discovered that the predecessor of the Nuclear Regulatory Commission, the Atomic Energy Commission, is the one that created that Davey Crockett nuclear weapon system. Kind of had a conflict in interest in the apparent agency is the one that created the stuff they're making decisions on.

I know there's only a couple rounds found. The Army kept terrible record on that. The Army has really no definite idea where the depleted uranium rounds are. Could have been bombarded from aerial bombs or artillery or whatever.

But they need to be found. And I think the Army need to put in a sufficient number of air filters with a size appropriate to catch the very fine particles, .5 microns, I believe it was, an appropriate size. When you use a large filter, it's like trying to catch flies with a volleyball net. It goes right through so you won't catch anything.

Response 4 to H-28:

The U.S. Atomic Energy Commission (AEC) was an agency of the U.S. government established after World War II by Congress to foster and control the peacetime development of atomic science and technology. The AEC had a dual role in licensing the use of radioactive materials and promoting nuclear power. By 1974, the AEC's regulatory programs had come under such strong attack that Congress abolished the agency under the Energy Reorganization Act of 1974, which assigned its functions to two new agencies: the Energy Research and Development Administration and the Nuclear Regulatory Commission.

The shipping records indicate 714 M1 Spotting Rounds were delivered to Hawai'i; there is no reason to believe there were more than that. The Army does not know the exact number fired at each location; the Army knows that up to 714 rounds were fired in Hawai'i for training at PTA and Schofield Barracks. The rounds were split for usage at PTA and Schofield Barracks.

But the people here need some relief, I think, from the destruction of our environment, contamination of our basic needs such as water, the air that we breathe. Down in the area of Kona, it's the highest per capita rates of several weird cancers. Not only highest in Hawaii, but higher than the United States.

And it's not coming from the vog. People with the vog themselves have those types of cancers than people in Kona (unintelligible). Something needs to change. You can find somebody to move forward conflict resolution in a peaceful manner and work towards supporting for search and rescue or providing aid to the guys in field, stuff like that. I think that's more faith for Hawai'i rather than learning how to kill more people.

I'm pau. Issue close. Mahalo.

H-29: Mark McNett.

The name is Mark McNett, no middle name. Long-time resident of Hawaii. Decade to decade through millennium to millennium. Just a quick clarification and reference.

Clarification: I'm all for everything that's on those easels to protect my close kin. And it's not all about self-interest.

Correction. I said reservist, probably National Guard, maybe you can be both things. I'm not sure.

And the final 3 1/2 minutes, the reference to the medical facts. Not just the, you know, kids breathing diseases. Perhaps you saw it in the news. Right around exactly 50 percent of mothers delivering babies on this island, A, smoked; or, B, drank alcohol; or, C, did drugs during pregnancy, carrying their embryos, fetuses, and preterm, and premature babies.

So you have like amount. And even more because the young single men are known to do a lot more drugs and dope and smoke cigarettes. So that is why the car culture and the drug culture is now the culture and all others.

So I will yield back 2 1/2 minutes to anyone. Under parliamentary procedure I'm giving anyone 2 1/2 minutes. And speak from the soul. The na'au of the spirit wisdom. Not just the mana, the learning of the knowledge, na'au; from the puuwai, the heart.

Response 1 to H-29:

These comments are beyond the scope of the EIS.

H-30: Pete Lindsey.

I live here in Kauwe, Hawaiian Homestead, and I support this project. I'm a member of the Hawaiian Construction Duty Local 66. Like I said, construction has been my way of life. That put food on the table and pay the bills for my family.

We have about 400 -- over 400 laborers on the Big Island. All of them are environmental laborers, landscaping, guardrail, fencing. So we the one that take care of the school and there's anything to do with environmental.

We have training class for that. I also am a Vietnam vet. That's why I'm here today. And I believe in training. So I do support this project. Thank you for this time.

Response 1 to H-30:

Thank you for your comment.

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