UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

November 6, 2008

ATTN: Makua SDEIS Public Comments
USAG-HI Public Affairs Office
742 Santos Dumont Avenue, WAAF
Schofield Barracks, HI 96857

Subject: Draft Supplemental Environmental Impact Statement for Military Training Activities at Makua Military Reservation, Hawai'i (CEQ # 20080361)

Dear Public Affairs Office:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced Draft Supplemental Environmental Impact Statement (DSEIS) pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Thank you for agreeing to accept our comments past the comment due date (email from Col. James W. Herring, Jr., 10/31/08). Our detailed comments are enclosed.

EPA reviewed the Draft Environmental Impact Statement (DEIS) and provided comments to the Army on October 5, 2005. We rated the DEIS as Environmental Concerns - Adequate (EC-1) and expressed concerns regarding the introduction of additional weapons-related contaminants to soil and water already contaminated by military activities, evidence of existing pollutant migration, and the use of weapons that have a high potential to cause wildfires. We recommended the selection of Alternative 1, which meets the stated training need with the least environmental impact. We also recommended the Army commit to prompt removal of soils with increased levels of contamination or "hotspots" to reduce potential for further pollutant migration, and to control of run-on and runoff from contaminated areas.

EPA commends the Army for the addition of mitigation measures incorporating remedial actions at the Open Burn/Open Detonation (OB/OD) Area. We continue to recommend removal of hotspots in all areas where contaminants exceed Preliminary Remediation Goals (PRGs), with priority for those areas that exceed industrial PRGs, specifically Objective Elk and the Makua Stream Firing Area.

EPA also commends the Army for including evaluation of an additional site at Pohakuloa Training Area (PTA) on Hawaii in the DSEIS, in response to public comments. Based on information in the DSEIS, it appears that training at this alternative site would result in less environmental impact than at Makua Military Reservation (MMR). We recommend selection of this alternative site, and recommend evaluating less-intensive training options at this site in the Final EIS. We also request that mitigation be identified to prevent impacts to groundwater at

PTA and extend our recommendation for hotspot removal above, to this site. If the Army selects MMR as the training site, we continue to recommend the least-intensive training option to meet the stated training need (Alternative 1), to slow the incremental contamination and migration that is occurring to soil and water resources.

Some of EPA's substantive comments on the DEIS were not addressed in the Army's response to comments in Appendix K. We request more substantive responses in the FSEIS. We also request additional information regarding groundwater impacts and mitigation for the PTA site. We have rated the DSEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions").

We also request the Army commit to obtaining concurrence from the U.S. Fish and Wildlife Service for any determination the Army makes regarding impacts to threatened and endangered species for project elements not included in the 2007 Biological Opinion.

We appreciate the opportunity to comment on this DSEIS. EPA continues to encourage the Army to take a long-term stewardship approach to site management at Makua to reduce future cleanup costs and benefit the residents of Hawaii. When the Final SEIS is released, please send one hard copy and CD to this office at the above address (mail code: CED-2). If you have any questions, please contact me at 415-972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

Karen Vitulano for

Kathleen M. Goforth, Manager
Environmental Review Office (CED-2)

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Dawn Greenlee, U.S. Fish and Wildlife Service

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

EPA DETAILED COMMENTS ON THE MAKUA MILITARY RESERVATION MILITARY TRAINING ACTIVITIES DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, NOVEMBER 6, 2008

Alternatives / Purpose and Need

Consider Pohakuloa Training Area

EPA commends the Army for including an alternative site location at Pohakuloa Training Area (PTA) on Hawaii in the DSEIS, in response to public comments. It appears that this alternative may result in reduced impacts to some resources. For the PTA site, all ammunition would be fired within the existing impact area. No land use conflicts or impacts to recreation would occur, such as those that would occur at Makua Beach for the Makua alternatives. Unlike the Makua alternatives, no impacts would occur to spinner dolphins; there would be less potential to further contaminate seafood with training-related contaminants; and since PTA does not allow public access, this alternative appears to present fewer impacts to environmental justice populations.

Potential impacts to groundwater should be more carefully evaluated for PTA in the FSEIS, however. The DSEIS indicates that the site experiences rapid infiltration to the subsurface (p. 4-103) and that there are few data available to evaluate groundwater quality (p. 3-123). It is also unclear why reduced capacity alternatives were not included for PTA.

> *Recommendations:* EPA recommends that the FSEIS include alternatives that vary in training intensity at the PTA site, as alternatives do for training at MMR.
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> We recommend mitigation for potential impacts to groundwater be identified for PTA alternatives in the FSEIS. Because of limited data, monitoring of groundwater quality should be included. We also suggest hotspot cleanup of the areas containing lead concentrations above the industrial PRG (p. 3-337), especially if tungsten-containing "green ammunition" is used, since tungsten reduces soil pH and can increase the mobility of lead in soils[1].
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> Because fewer impacts would occur at the PTA site, we recommend this site be utilized to meet the stated training need.

Consider less intensive training at Makua and Pohakuloa

In our comments on the DEIS, we noted the incremental contamination to soil and groundwater that is occurring from training at Makua[2] and recommended the Army consider pollution prevention (P2) opportunities, consistent with Army policy and CEQ guidance, in decision-making for this project, including consideration of Alternative 1 which meets the purpose and need with the least environmental impact.

Since the DEIS was released in 2005, training needs have changed. The DSEIS notes that Combined-Arms Live-Fire Exercises (CALFEXs) train soldiers for major combat against

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[1] http://data2.itc.nps.gov/digest/printheadline.cfm?type=Announcements&id=3726

[2] Contamination includes metals, explosives, pesticides, VOCs, and dioxins in soil, some at concentrations above EPA's industrial preliminary remediation goal (PRG).

conventional opponents, which is not what is occurring in Afghanistan and Iraq. For these assignments, soldier training includes tasks related to irregular warfare and stability operations (p. ES-3), and to countering improvised explosive devices, which account for the majority of all US casualties (p.1-10). Therefore, it appears that Alternative 1 with additional convoy live fire exercises would be appropriate for consideration.

We understand that the Army's approach has been to look at the highest level of activity under each alternative and that the Army desires flexibility in training, however, with the changes in immediate training needs, the need for the preferred alternative with up to 50 CALFEXs per year is not well substantiated.

> *Recommendation:* The FSEIS should evaluate an alternative with reduced capacity at the PTA site, which would also meet the purpose and need for the project. EPA recommends the Army ensure that an alternative that meets the most immediate training needs while slowing the incremental contamination of soil and water resources be selected.

Army's Response to Comments on the DEIS

The DSEIS contains responses to comments received on the DEIS in Appendix K. Some of EPA's comments were not sufficiently addressed. While a "comment noted" type of response may be adequate for some of our comments, others that were substantive did not appear to receive sufficient consideration.

The Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) dictate how an agency shall respond to comments in the Final EIS (40 CFR 1503.4). If no modifications to the document are made, CEQ indicates that the agency shall explain why the comment does not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response (40 CFR 1503.4 (a)5.). CEQ's 40 Most Asked Questions about NEPA, question 29a, states that that the agency must state what its response is, and if the agency decides that no substantive response to a comment is necessary, it must explain briefly why.

It is not clear whether the FSEIS will include responses to comment on the DEIS or just responses to comments received on the DSEIS; therefore, we raise this point so that the FSEIS can include responses to comments on the DEIS not adequately addressed in Appendix K of the DSEIS.

> *Recommendation:* Comments we believe warrant a more appropriate response, per CEQ guidance, and further discussion in the FSEIS, include:
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> - Our recommendation that the Army implement the mitigation mentioned on p. 4-71 of the DEIS which includes "controlling run-on and runoff from areas with surface soil contamination" to contain and/or prevent the migration of contaminants. The Army thanked us for our comment and removed the text that identified this mitigation from the DSEIS.

- Our suggestion that the Army should assess local soil properties at MMR when deciding on use of tungsten-containing ammunition (green ammunition) due to preliminary indications that green ammunition may complicate lead cleanup efforts by lowering pH/increasing solubility of lead in certain soils. The Army thanked us for our comment and removed the text from the DEIS (p. 4-161) that addressed use of green ammunition. We note that table 2-3 in the DSEIS (p.2-26) identifies the proposed use of green ammunition. We also note that both Makua and PTA contain areas with lead concentrations exceeding the industrial PRG (p. 3-337).
- Our suggestion that if portions of Makua Stream will be used in the selected alternative, mitigation should be identified to avoid troop impacts to this riparian area. The Army thanked us for our comment.

We continue to recommend the following mitigation be included in the ROD:

- If an alternative with high fire-risk weapons is selected, a commitment to the mitigation identified on page 4-182 of the DEIS (p. 4-236 - 4-237 of the DSEIS). This includes increasing staff and training for the Wildfire Management Program and improvements to fire fighting infrastructure, such as additional water storage capacity and water distribution system upgrades.
- The mitigation mentioned on p. 4-92 (DSEIS p. 4-113) to prepare and implement an erosion control plan to mitigate the significant impact of soil erosion (DSEIS p. 4-112). The erosion control plan would include provisions and methods for monitoring and identifying management practices for addressing erosion problems including reseeding slopes or planting vegetation buffers, constructing run-on and runoff controls, recontouring or filling damaged areas, or avoiding damaged areas.

Environmental Stewardship

In our comments on the DEIS, EPA encouraged long-term site stewardship, consistent with Army policy and CEQ guidance, and consideration of future costs to the American people that would incur from future cleanup of contamination resulting from the project alternatives. The Army responded that because cleanup is not proposed, and because an estimate of costs associated with any potential cleanup is speculative, the EIS has not been revised to include this estimate.

We are concerned that this response does not recognize the intent of NEPA to facilitate sustainable decision-making. NEPA analyses encourage agencies to address the environmental implications of proposed decisions for the purpose of advancing the nation's environmental policy[3] which includes fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations (Sec. 101 (b) 1.). By addressing the environmental implications of proposed decisions at an early stage in decision-making, agencies can effectively allocate future resources.

[3] Set out in Section 101 of NEPA, 42 U.S.C. § 4331

Recommendation: We continue to recommend the Army view the long-term environmental effects of the alternatives to ensure there is a balance between short-term security needs and long term environmental health. Considering future costs of cleanup, even if qualitatively, is important for sustainable decision-making.

Different Scope of Endangered Species Act and NEPA alternatives

The project scope for the NEPA alternatives and that used for the Section 7 consultation under the Endangered Species Act (ESA) are different. The DSEIS indicates that some project components were removed from the scope of the Section 7 consultation because they posed an impact to endangered species (p. 1-5). The preferred alternative components removed from Section 7 consultation include the use of illumination munitions, training activities at Ka-ena Point Trail, and training activities on C-Ridge between the north and south lobes of the training area (p. 2-47). The DSEIS states that for these parts of the preferred alternative not covered under the 2007 Biological Opinion, the Army would reinitiate consultation with the U.S. Fish and Wildlife Service (USFWS) prior to conducting these exercises.

The DSEIS identifies this approach, but the DSEIS is also misleading in that it includes statements such as the footnote on p. 2-52 which states that the military training parameters (including types of weapons and land areas to be used) set forth in the EIS are consistent with the proposed actions that formed the basis of the formal Section 7 consultation with USFWS and comply with any restrictions established in the BO and supplemental BO. Since certain weapons and geographic locations were excluded from the Section 7 consultation, this statement is unsupported, if not false. Page 4-124 also erroneously states that the Army has completed Section 7 consultation with USFWS on the effects of the preferred alternative on listed species and critical habitat. These errors should be corrected.

The USFWS and the National Marine Fisheries Service (NMFS) have proposed to amend their regulations governing interagency cooperation under the ESA. If adopted, the amended regulation will affect how federal agencies consult under Section 7 of the ESA[4]. Under the proposed rule, the Army would not be required to seek concurrence from USFWS or NMFS for determinations of ''not likely to adversely affect''. In light of this proposed rule, we are concerned about the possibility of a ''not likely to adversely affect'' determination being made without the benefit of USFWS review for project components removed from the scope of the Section 7 consultation. We understand that the Army does not fund mitigation that is not associated with a BO. Therefore we are concerned that impacts from portions of the project that are not part of the 2007 BO will not be fully mitigated since, without a BO, there is no mechanism to ensure that mitigation will occur and be funded.

Additionally, the reasonable and prudent measures included in the 2007 BO are not identified in the DSEIS as mitigation for the project. All commitments made during ESA Section 7 consultation with the USFWS and in the resultant 2007 BO and 2008 amendment to the BO should be included in the FSEIS and ROD. This includes the requirement that certain weapons and munitions be used only after conditions for their use are achieved. For example, tracer

[4] Federal Register, Vol. 73, No. 159, Friday, August 15, 2008, Proposed Rules

ammunition would not be used unless it is during "green" fire danger rating periods, which occur most often from November to March, during the evenings and the early mornings (ES-10).

Recommendation: EPA recommends that the Army include and select an alternative in the FSEIS that corresponds with the project description that was used for the Section 7 consultation with USFWS which received a BO and incidental take statement.

Alternatively, if the above recommendation is not pursued, we recommend the Army commit, as part of the ROD for the selected alternative, to conduct formal or informal consultation with USFWS for all project elements not already subject to consultation (removed from preferred alternative for the BO). The Army should commit to requesting concurrence from USFWS for its determination, even if it makes a ''not likely to adversely affect'' determination. Because of the potential risks to species from these project elements removed from consultation (p. 1-5), it is important to continue working with USFWS to obtain their expertise. If this approach is taken, the FSEIS should clearly identify the process that will occur.

The FSEIS should identify funding sources for mitigation that is not associated with a BO and discuss likelihood that mitigation will be funded and implemented. CEQ has stated that the probability of the mitigation measures being implemented must be discussed in the EIS and ROD, including the likelihood that such measures will be adopted or enforced by the responsible agencies. *"If there is a history of nonenforcement or opposition to such measures, the EIS and Record of Decision should acknowledge such opposition or nonenforcement. If the necessary mitigation measures will not be ready for a long period of time, this fact, of course, should also be recognized"* (Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, #19b)

If Alternative 4 at Pohakuloa Training Area on Hawaii is selected over the preferred alternative, the DSEIS should identify the process that will occur regarding additional consultation. The DSEIS does not fully address impacts from Alternative 4 and simply repeats the mitigation measures from the Stryker Brigade Combat Team (SBCT) EIS (p. 4-138). We recommend the Army adopt all potential mitigation identified in the DSEIS and coordinate with USFWS on additional measures to mitigate the greater fire and invasive species risk.

Finally, in addition to including all mitigation measures from the BOs in the FSEIS and ROD, we also recommend that the conservation recommendations included in the BO be included in the FSEIS and ROD.

Additional comments:

- The DSEIS removed information regarding the detailed history of waste disposal at the OB/OD area that was contained in the DEIS, p. 3-103. The DEIS included much higher estimates and also identified waste generated by the University of Hawaii. It is not clear why this background information was not included in the DSEIS. We recommend including it for a fuller disclosure of the contamination history.

- Page 4-127 says the marine resources study showed that marine resources (fish, limu, shellfish, etc.) are not contaminated by substances associated with training, but this is contradicted by results on p. 3-97 which identifies nitroglycerin and RDX detected in Makua Beach nearshore specimens but not in background specimens. This should be corrected in the FSEIS.

- The DSEIS includes Additional Mitigation 3a on p. 4-147 through 4-149 for mitigation of impacts to marine mammals. A commitment to this mitigation should be included in the FSEIS and ROD.

- The DSEIS states that a surface water monitoring plan would be developed (p. 4-97) and a groundwater monitoring program would be developed (p. 4-98). Commitments to these programs should be included in the FSEIS and ROD.