

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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November 30, 2011

PTA PEIS
United States Department of the Army
c/o Booz Allen Hamilton
P.O. Box 514
Honolulu, HI 96806

Subject: 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, Hawai'i, (CEQ # 20110344)

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 DPEIS 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 (mail code: CED-2). If you have questions, please contact me at (415) 972-3856 or kelly.thomasp@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

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

cc via email: Alec Wong, Hawaii Department of Health, Clean Water Branch
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Air Quality

Particulate Matter

The DPEIS mentions that the entire state of Hawaii 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 PDEIS 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). Hawaii’s regulations cover emissions of visible dust, and require reasonable precautions.

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 DPEIS 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.

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.

Recommendations:

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

The FPEIS should analyze health effects of particulate matter exposure. We recommend dispersion modeling to demonstrate that 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.

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

Fugitive Dust Source Controls:

¹ As stated at 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.”

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

Mobile and Stationary Source Controls:

- 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 such fuel cannot be reasonably procured in the market area.

Administrative controls:

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

Greenhouse Gas Emissions

The DPEIS compares annual Greenhouse Gas (GHG) emissions for the project, IPBA maneuver training emissions, to 2009 total U.S. GHG 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.

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

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

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.

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 characterize storm water regulation at the facility.

The DPEIS 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 operations). The DPEIS 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 increases 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 and the Public Works Technical Bulletin⁶

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

⁴ See Stormwater Phase II Final Rule, Conditional No Exposure Exclusion for Industrial Activity, EPA 833-F-00-015 January 2000 (revised December 2005) Fact Sheet 4.0 <<http://www.epa.gov/npdes/pubs/fact4-0.pdf>>.

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

⁶ Public Works Technical Bulletin 200-1-62, 1 October 2008, Low Impact Development for Sustainable Ranges: Stormwater Design and Planning Guidance for Development within Army Training Areas

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 include 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.

Training Intensity

The DPEIS 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 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.

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 the 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.

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.

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.

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

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 of the location of the closest residents.

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 Pohukaloa 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-level analysis. While the DPEIS clearly states throughout the document that it is both a 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 the Army clearly title documents as both programmatic and project level analysis when appropriate.

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.

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.