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

June 7, 2006

Mr. Ron Lanier
15 CES/CEV
75 H Street
Hickam AFB, HI 96853-5233

Subject: Draft Environmental Impact Statement (DEIS), Housing Privatization Phase II, Hickam Air Force Base and Bellows Air Force Station, O'ahu, Hawaii (CEQ # 20060146)

Dear Mr. Lanier:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document 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. Our detailed comments are enclosed.

The project proposes to transfer housing units and associated infrastructure to a private entity (the Selected Offeror), renovate existing units, construct new units, and implement a long-term lease for 361 acres of land. Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions").

The proposed project provides a number of opportunities for environmental leadership and innovation. There is guidance available, from the Council on Environmental Quality (CEQ), Executive Orders, and the recent Memorandum of Understanding (MOU) entitled "Federal Leadership in High Performance and Sustainable Buildings," to guide agencies towards better environmental stewardship. We note that the National Environmental Policy Act (NEPA) does not require that an impact be "significant" before mitigation can be presented in an EIS. "All relevant, reasonable mitigation measures that could improve the project are to be identified. . . . Mitigation measures must be considered even for impacts that by themselves would not be considered 'significant.'" (CEQ's Forty Questions, #19a).

We encourage the Air Force to take advantage of these environmental leadership opportunities and ensure that guidance developed for federal agencies is utilized in this privatization effort. Specifically, we recommend the Air Force integrate sustainable building and design features into this project per the MOU cited above. We also request that additional air pollution mitigation measures be included to provide the utmost protection to military families during the construction phase. We encourage the Air Force to preserve the historic Fort Kamehameha area and pursue its listing on the National Register of Historic Places. Finally, we request additional information in the Final Environmental Impact Statement (FEIS) regarding the

stormwater management system, cumulative impacts to air quality, and various other clarifications.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3988 or Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

/s/

Duane James, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosure: EPA's Detailed Comments
Summary of EPA Rating Definitions
Federal Leadership in High Performance and Sustainable Buildings MOU

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR HOUSING PRIVATIZATION PHASE II, HICKAM AIR FORCE BASE AND BELLOWS AIR FORCE STATION, HAWAII, JUNE 7, 2006

Federal Leadership in Sustainable Building

The project will involve substantial demolition, renovation and construction of new housing units. The Draft Environmental Impact Statement (DEIS) references Executive Order (E.O.) 13123 – Greening the Government through Efficient Energy Management (p. 2-19), and states that the Air Force, in accordance with E.O. 13123, will ensure that Federal and Air Force energy efficiency goals are included in the design of the privatized housing units. We note that Section 102 of E.O. 13123 states that each agency shall expand their use of renewable energy and shall strive to install 20,000 solar energy systems by 2010. Section 207 of E.O. 13123 also references water conservation goals.

In addition to E.O. 13123, on January 24, 2006, numerous federal agencies, including the Department of Defense (DoD), signed the Memorandum of Understanding (MOU) entitled "Federal Leadership in High Performance and Sustainable Buildings", in which these agencies committed to design, construct and operate their facilities in an energy-efficient and sustainable manner. Through the MOU, the DoD agreed to reduce the energy cost budget by 30% for new construction, and 20% for major renovations, employ strategies to reduce indoor and outdoor water use and reduce stormwater runoff and pollution, use products with recycled content, and use biobased products made from rapidly renewable resources and certified sustainable wood products.

Recommendation:

The Air Force should ensure the goals of the MOU for high performance and sustainable buildings are followed in addition to those of E.O. 13123 for all new and renovated privatized units. The FEIS should:

- identify the goals for energy and resource savings for the units as specified above,
- include a commitment to utilize solar energy and indicate what percentage of units will include solar energy systems
- identify goals and methods to reduce indoor and outdoor water as specified in the MOU
- include the commitment to use recycled products and certified sustainable wood products.

These commitments should be specified in the contract with the Selected Offeror as well as documented in the FEIS and the ROD.

Water Resources

A jurisdictional delineation of waters of the U.S. does not appear in the DEIS, although the document identifies several man-made canals which may contain groundwater seepage as well as stormwater runoff from impervious areas. Two of these canals, the Kumumau'u Canal and the

Manuwai Canal, contain wetlands (p. 3-32). The DEIS states that the sites for new construction are not located in any of the wetlands and would not be expected to result in significant adverse impacts to them. However the indirect effects of adding additional impervious surfaces to the watershed is not discussed, nor is there a commitment for protection of these wetlands (i.e., not to concrete-line the canals).

The project presents an opportunity to integrate the drainage canals into a stormwater treatment system that could include components such as grassed filter strips, grassed swales, and/or detention basins. The DEIS states that the project would not result in any substantial change in the amount of impervious area (p. 4-10), but does not provide the percentage of pre- and post-project impervious surface area to demonstrate this. The upgrading of the housing at Hickam should include enhancing the storm drainage system to ensure protection of existing wetlands and inclusion of stormwater treatment structures. This is consistent with the MOU for sustainable buildings mentioned above, in which the DoD committed to reducing stormwater runoff and pollution.

Recommendation:

In the FEIS, include more information regarding the existing storm drain system, including a description of the man-made canals, a map identifying their location, and a determination if they constitute waters of the U.S. A stormwater management system should be developed for the project and included in the FEIS which includes stormwater treatment structures such as grassed swales or channels, grassed filter strips, bioretention areas (landscaping features designed to treat runoff), and preservation of existing natural-bottomed canals and associated wetlands. Measures to preserve wetlands are especially important, to mitigate existing impacts to other wetland areas as identified in the DEIS (p. 3-32). Other Best Management Practices should be included to reduce the amount of impervious areas, such as the use of alternative pavers (permeable or semi-permeable surfaces that can replace asphalt or concrete and can be used for driveways, parking lots and walkways). The Air Force should ensure these design features are implemented by including them in the contract with the Selected Offeror as well as in the ROD.

Air Quality

Particulate Matter greater than 10 microns (PM_{10})

While the air in the project site currently meets the National Ambient Air Quality Standards (NAAQS), the DEIS recognizes that impacts to air quality from PM_{10} will occur during construction of the project. The DEIS proposes only one mitigation measure to address these impacts - watering the construction site. Additional measures to reduce fugitive dust should be included in the FEIS and adopted in the Record of Decision (ROD).

Recommendation:

Implement the following fugitive dust source controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate, to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Use metal track-out elimination devices - metal devices trucks and equipment must drive over before exiting the construction site to remove dirt from tires. Wash or vacuum-sweep paved road surfaces to remove visible track-out.
- Install wind fencing on perimeters and around subdivided areas within the site.
- 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.
- Phase grading operations, where applicable

Diesel Emissions / Construction Emissions Mitigation

Emissions from diesel engines found in trucks and construction equipment contain tiny particles known as "diesel particulate matter" (DPM) which can create serious health problems for adults and have extremely harmful effects on children and the elderly. Children are especially adversely affected by diesel emissions because their respiratory systems are still developing and they have a faster breathing rate. Diesel exhaust also contains ozone-forming nitrogen oxides and toxic air pollutants. Diesel exhaust is classified by EPA as a "likely" human carcinogen at environmental exposure levels (*Health Assessment Document for Diesel Engine Exhaust*, EPA 2002). Exposure to diesel exhaust may contribute to respiratory irritation and lung damage. The DEIS does not discuss DPM or hazardous air pollutants (air toxics) associated with the project. In addition, the DEIS does not contain mitigation measures that would reduce impacts to air quality and human health from the construction phase of the project.

Recommendation:

The FEIS should disclose the available information about the health risks associated with DPM and mobile source air toxics (see http://www.epa.gov/otaq/toxics.htm).

EPA recommends including a Construction Emissions Mitigation Plan (CEMP) in the FEIS and adopting this plan in the ROD. EPA recommends the following mitigation measures be included in the CEMP:

- Reduce emissions of DPM and other air pollutants by using particle traps and other technological or operational methods.
- Employ periodic unscheduled inspections to ensure that diesel-powered construction equipment is properly tuned and maintained and shut off when not in direct use. Ensure construction equipment is not modified to increase horsepower except in accordance with established specifications. Develop and enforce an anti-idling policy at the construction site.

- Locate diesel engines, motors, and equipment staging areas as far as possible from residential areas and sensitive receptors (schools, senior centers, daycare centers, etc.). Route construction vehicles away from these receptors.
- Require low sulfur diesel fuel (<15 parts per million sulfur), if available.
- Reduce construction-related trips of workers and equipment, including trucks.
- Lease or buy newer, cleaner equipment (1996 or newer model), using a minimum of 75 percent of the equipment's total horsepower.
- Use engine types such as electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations.
- Work with the local air pollution control district(s) to implement the strongest mitigation for reducing construction emissions.

Cumulative Impacts

The DEIS identifies other planned construction projects at Hickam Air Force Base (AFB) and Bellows Air Force Station (AFS) and states that the majority of these actions have been previously addressed in Environmental Assessments (EAs). These EAs concluded that each project would have minor or minimal impacts to air quality. The DEIS does not discuss the cumulative impacts of multiple projects occurring at the same time, however, and a cumulative impacts analysis was not performed.

Recommendation:

The FEIS should include a discussion of cumulative impacts from multiple projects. If estimated air emissions for those projects are available in the respective EAs, they should be included in a cumulative impacts table such as Table 4.5-1 to show a potential cumulative effect in relation to the evaluation criteria, such as the 100 ton per year general conformity deminimus criteria used for evaluating impacts from PM_{10}.

In addition, Table 4.5-1 and 4.5-2 should include the deminimus levels used for the impact assessment and include estimated emissions before as well as after mitigation (table includes only after mitigation estimates). Update Table 4.5-1 and 4.5-2 to include the additional mitigation measures recommended above, and quantify emissions reductions that could be expected from them.

Cultural Resources

The DEIS describes the valuable historical resources in the Hickam Historic District and at Fort Kamehameha. Fort Kamehameha is described as a significant historic resource with a unique architectural style not seen elsewhere on the base. Materials, craftsmanship and design of Fort Kamehameha housing are "unequalled by other developments on Hickam AFB" (p. 3-39).

While we understand the need to correct nonconforming land use, we encourage the Air Force to do so in a manner that will preserve Fort Kamehameha for listing on the National Register of

Historical Places, for which it is eligible. Therefore, we encourage the Air Force to pursue an option that preserves this historic resource and does not demolish it, such as adaptive reuse, or relocation if this would not exclude it from listing on the National Register.

Regarding Section 106 compliance, the DEIS states that the Selected Offeror will, as part of property management, be responsible for continued 106 compliance (p. 2-18, 4-23). The document also states that compliance with the National Historical Preservation Act is the responsibility of the government and cannot be contracted out (p. 4-21). It is not clear how these statements reconcile.

Recommendation:

Consider the intact preservation of Fort Kamehameha and pursue listing of this property on the National Register of Historical Places.

Clarify in the FEIS how compliance with Section 106 will occur and by what entity and mechanism. If the Selected Offeror will be responsible for compliance, identify the mechanism that will ensure this compliance occurs and is disclosed to the public, as appropriate.

Scope of Work at Bellows AFS

It is unclear whether any ground disturbing activity will occur on Bellows AFS under the project alternatives. The DEIS indicates that 6 housing units constructed in 2004 would be conveyed and Table 2.6-1 indicates no demolition or renovation will occur for these units. However, the mitigation measures for cultural resources include measures to be followed should historical materials be discovered during ground-disturbing activities. These measures also state that no earth-disturbing activities such as excavation or running of heavy equipment will occur outside the specified privatization limits for Bellows AFS (p. 4-26), implying that earth-disturbing work could occur within the privatization limits.

The DEIS states that there is no wastewater collection or treatment works in the housing area at Bellows AFS, and that housing units are served by cesspools, septic tanks, and household aerobic units (3-44). The DEIS does not identify the method of wastewater treatment for the 6 housing units associated with the project. Page 4-28 states that under Alternatives 1 and 2, wastewater would continue to be treated at Bellows AFS Wastewater Treatment Plant, which seems to contradict the statement on page 3-44.

Recommendation:

In the FEIS, clarify the wastewater treatment scenario for the units on Bellows AFS. It is assumed that since the housing units on Bellows were constructed in 2004, the units do not contain cesspools. If cesspools do exist for the units to be conveyed at Bellows AFS, and any changes or upgrades are made, compliance with Hawaii Admin Rule 11-62 is required, which mandates the removal of cesspools and upgrades to the wastewater treatment units.

Hazardous Materials

Spill Reporting

The DEIS identifies mitigation measures that document procedures related to hazardous materials spills (p. 2-16). The DEIS does not fully reflect applicable Federal requirements (40 CFR Part 112) to report an oil spill or release of a hazardous substance to the National Response Center, nor does it identify which entity will be responsible for this reporting.

> *Recommendation:*
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> The FEIS should include requirements on reporting an oil spill or release of a hazardous substance to the Federal Government's National Response Center (NRC) at 1-800-424-8802. The NRC is staffed 24 hours a day by the Coast Guard. Reporting information is available at: http://www.epa.gov/oilspill/oilhow.htm.
> The FEIS should identify who will be responsible for this reporting, and document this reporting requirement in the mitigation measures of the FEIS and ROD, and in the contract with the Selected Offeror if they will be the reporting party.

Asbestos

Page 4-18 states that no mitigation measures would be required for asbestos. However measures to reduce the exposure of asbestos are identified on page 4-14, including the development of an asbestos removal plan, removal of asbestos using a licensed asbestos-abatement contractor, and wetting of non-friable asbestos prior to removal.

> Recommendation:
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> Include the measures identified in Section 4.7.2.4 in the mitigation measures section of the FEIS and ROD.

Miscellaneous

- The traffic analysis used in the evaluation of impacts to transportation systems is over 20 years old (p. 3-46). The FEIS should address whether this data is still relevant for existing conditions at Hickam AFB.

- Table 2.6-1 does not reflect the 2 units proposed for retention by the Air Force for a museum at Fort Kamehameha (p. 2-13).

- The references for two citations are not included in the reference list: USEPA 1988 (p. 4-7), and O'Donnell 2001 (p. 3-36).