

US EPA ARCHIVE DOCUMENT



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

June 27, 2006

Mr. Jonathan Wald
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Subject: Draft Environmental Impact Statement (DEIS), Establishment and Operation of an Intelligence, Surveillance, Reconnaissance (ISR), and Strike Capability, Anderson Air Force Base, Guam (CEQ # 20060173)

Dear Mr. Wald:

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 Air Force proposes to locate the U.S. Pacific Command's ISR Strike capability, aerial refueling aircraft, and support personnel at Anderson Air Force Base (AFB) to increase response to adversaries' military or political objectives in Asia. Numerous facilities would be constructed as part of the proposed action, and the AFB population would increase by approximately 3000 personnel. The Air Force's preferred alternative is Alternative A.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). We have concerns regarding the project's proposal to substantially increase the amount of wastewater flowing to the Guam Waterworks Authority (GWA) Northern Wastewater Treatment Plant (WWTP). This WWTP is currently out of compliance with its National Pollutant Discharge Elimination System (NPDES) permit under existing conditions, and EPA is working with GWA on reissuing a permit that considers GWA's waiver from secondary wastewater treatment requirements under Section 301(h) of the Clean Water Act. The current waiver application does not include an increase in flow from Anderson AFB and the DEIS does not discuss the impact the proposed project would have on GWA's 301(h) renewal or efforts by that agency to come into compliance.

The Air Force must ensure that wastewater from the project is disposed of in a manner that does not violate water quality standards. We recommend the Air Force begin discussions with GWA regarding expansion needs for the Northern District WWTP, possibly to include an upgrade of this facility to secondary treatment if Clean Water Act Section 301(h) requirements and water quality standards cannot be met.

Solid waste disposal at Anderson AFB is also a concern. It is not clear whether GovGuam will issue permits for the landfill expansion needed for the project, especially since it is located over a Sole Source Aquifer. More discussion is needed in the EIS to address aquifer contamination concerns and permitting limitations.

In addition, EPA has concerns regarding the lack of a complete cumulative impacts assessment. We understand that full details for other Department of Defense projects are not yet known. However, the Air Force should attempt a cumulative impacts assessment based on information that is known and acknowledge the uncertainty, consistent with Council on Environmental Quality (CEQ) Guidance.

Other concerns relate to noise impacts to residents, especially children, from the proposed project, and impacts to endangered species. We request additional information be included in the Final EIS regarding resource use by the needed 1,800 migrant construction laborers. We are also including suggestions for reducing impacts from the proposed project.

For all new development, EPA encourages the Air Force to commit to green building principles as outlined in Executive Order 13123 – Greening the Government through Efficient Energy Management and the recently executed “Federal Leadership in High Performance and Sustainable Buildings” Memorandum of Understanding.

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

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

Wastewater Treatment

The Guam Waterworks Authority (GWA) Northern District Wastewater Treatment Plant (WWTP) currently receives wastewater from Anderson AFB. According to the DEIS, the WWTP is currently operating at approximately 79% capacity (p. ES-6, 3-21) and the proposed action would increase this to 88% capacity (p. 4-34), and to 90% when considering other Anderson AFB projects (p. 4-44). The infrastructure impacts assessment does not include the wastewater that would be generated from the 1,800 migrant laborers required for the project (p. 4-89). If a construction camp of temporary housing is set up, wastewater would be transmitted to the GWA Northern District Wastewater Treatment Plant WWTP (p. 4-97).

The GWA Northern District WWTP is currently in a state of noncompliance with regard to its National Pollutant Discharge Elimination System (NPDES) permit and will need renovation to come into compliance. EPA is concerned that the Air Force is proposing a project that will increase flows to a noncompliant facility that does not currently meet water quality standards. The additional wastewater from the proposed action will put the Northern District WWTP near or at its design capacity and will impact its ability to achieve compliance with its NPDES permit.

EPA is currently working with GWA towards reissuing the NPDES permit. GWA is applying for renewal of its waiver from meeting secondary wastewater treatment requirements, per Clean Water Act Section 301(h). The current waiver application does not account for an increase in flow from Anderson AFB, however, and GWA would need to submit a new permit application for renewal of its Clean Water Act, Section 301(h) under the proposed project. Under existing conditions, EPA anticipates that GWA's Northern District WWTP NPDES permit would be reissued in 2007.

The increased wastewater flow from the proposed action could also affect the characteristics of the wastewater. While most of the increased flow is a result of additional personnel and therefore would be domestic in nature, there are elements of the project that could increase toxics loadings. Table 2.2-3 indicates a new UAV operations/maintenance facility, a wheel and tire shop, and a clean water rinse facility are part of Phase I of the proposed project. While oil/water separators would be added to these facilities, no information is provided regarding the existing or additional toxics loadings that would flow to the WWTP.

Additionally, we are concerned with the sewage backup problem identified in the DEIS, where the force main from the Back Gate Lift Station has caused raw sewage overflows into aquifer recharge injection wells (p. 4-41). There is no indication as to whether this problem has been remedied, if it is continuing, or if it will be addressed as part of the proposed action.

Recommendation:

The Final Environmental Impact Statement (FEIS) should identify probable sewage disposal locations and calculate the amount of wastewater that would be generated by the migrant laborers required for the project. Include this estimate in the infrastructure impact analysis and update the percent capacity of the WWTP for the project and cumulative impact analysis accordingly.

EPA requests that the FEIS identify what percentage of GWA's total flows originate from Anderson AFB, and how that percentage will change as a result of the proposed project. We also request a current volume estimate of toxic loadings for EPA's 126 priority pollutants and how that volume will change as a result of the proposed project.

The FEIS should also include a review of GWA's draft Water Resources Master Plan for compatibility. We understand GWA currently has plans to upgrade its facility to incorporate redundancy into operations that will allow for maintenance activities. We are not aware that GWA plans to expand capacity for increased Anderson AFB flows. Because the project, combined with other Anderson AFB projects, will bring GWA's facility so close to capacity (> 90% if migrant laborer flows are included), we strongly recommend the Air Force and GWA meet to begin discussions on capacity expansion of the Northern District WWTP. These discussions should include the impact the increase wastewater flow will have on GWA's 301(h) permit renewal and whether upgrades to secondary wastewater treatment will be needed.

In the short term, the Air Force should select Alternative B, which would lessen the increase in wastewater generation (a 38% increase as opposed to 57% increase under Alternative A) (p. 4-34, 4-39). The project should also include an upgrade or replacement of the collection system components that are causing raw sewage overflows into yards and the storm runoff system, and included in Table 2.2-3. In the FEIS, identify what action will be taken to ensure automatic overflow notifications to utilities personnel.

Cumulative Impacts Analysis

The cumulative impacts analysis for the DEIS included actions occurring on Anderson AFB only. The DEIS acknowledges that other DoD units have projects involving relocations to Guam, but that sufficient detailed information on those projects is not yet available to allow a detailed cumulative impacts assessment (p. ES-2). Instead, the cumulative impacts assessment for this project will be included in the Navy and Marine Corps NEPA documents when they are prepared.

While the levels of detail for these projects may be deficient, if the project is reasonably foreseeable, the Air Force should attempt a cumulative impacts assessment with the information known and acknowledge the uncertainty. The Council on Environmental Quality (CEQ) notes in its guidance document *Considering Cumulative Impacts under the National Environmental*

Policy Act that NEPA litigation¹ has made it clear that “reasonable forecasting” is implicit in NEPA and that it is the responsibility of federal agencies to predict the environmental effects of proposed actions before they are fully known. CEQ’s regulations provide for including these uncertainties in the environmental impact assessment where the foreseeable future action is not planned in sufficient detail to permit complete analysis. Specifically, CEQ’s regulations state:

“[w]hen an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, ...[that] cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known,...the agency shall include...the agency’s evaluation of such impacts based on theoretical approaches or research methods generally accepted in the scientific community”(40 CFR 1502.22).²

Recommendation:

Modify the cumulative impacts analyses to include a discussion of potential impacts from the Navy and Marine Corps projects planned for Guam. Utilize information in the DoD Master Plan for Guam, expected in July 2006, that will address military buildup and expansion activities. Where specific information is lacking, utilize general qualitative information and/or estimations based on information that is known. Similarly, include impacts that could be expected from the Air Force’s electricity-generating wind turbines at Anderson AFB, especially in relation to birds and bats (p. 1-3), and impacts expected from the munitions storage igloos (p. 2-42). Include past actions to the extent they impacts resources, such as the existing level of habitat fragmentation.

Noise Impacts

The project will lead to additional noise exposure from the increase in number of operations by noisier ISR/Strike fighter and bomber aircraft (4-13). While the DEIS does not clearly identify at what level noise impacts would be considered significant, it cites a U.S. Environmental Protection Agency (EPA) report that identifies noise levels protective of public health and welfare (p. 4-16). EPA identifies a day-night average sound level (DNL) of 55 dBA (A-weighted sound level measured in decibels) as protective for sensitive areas including residences, schools and hospitals.

The noise impact analysis shows that 2,310 people off-base will be exposed to sound 65 dBA and above, with 552 potentially highly annoyed by the change (Table 4.1-4). This represents roughly ten times more people experiencing these impacts that at present. Table 4.1-2 shows that three data test points, numbers 1, 9, and 10, are off-base and could represent sensitive area exposures. All three of these areas would experience sound above 55 dBA under Alternative A. Alternative B would result in 16 fewer average daily aircraft operations, slightly reducing

¹ *Scientists’ Institute for Public Information, Inc., v. Atomic Energy Commission* (481 F.2nd 1079 D.C. Cir. 1073)

² *Considering Cumulative Impacts under the National Environmental Policy Act*, Council on Environmental Quality, January 1997, p. 19-20

impacts.

The greatest increase in noise is estimated to occur at an off-base school, with an increase from DNL 41 dBA to 62 dBA. Noise at an on-base school would also experience an increase in DNL to 62 dBA (p. 4-9). EPA is especially concerned with noise levels above the EPA-recommended DNL at schools (55 dBA), given that research on the effects of aircraft noise on student learning indicates interference with reading, motivation, language and speech, and memory (p. 4-12).

Recommendations:

Identify significance criteria for the analysis of noise impacts in the FEIS. We recommend that EPA's recommended DNL of 55 dBA for residences, schools and hospitals be used. Estimate the DNL's for the 10 analysis points under Alternative B and include in Table 4.1-2. Commit to the following mitigation in the FEIS and Record of Decision (ROD):

- Retrofit all on- and off-based schools with appropriate measures to achieve the new classroom acoustics standard of the American National Standards Institute (ANSI) as identified on page 4-20. These mitigation measures could include adding insulation, adding a second window pane or replacing windows with better sound attenuation, sealing gaps or leaks in windows and doors, installing baffles in vents and improving the exterior roofing, consistent with radon safety.
- Construct all new schools on the AFB to the ANSI classroom acoustics standard. Alternative A identifies at least one new high school. However, it appears that additional schools will be needed to accommodate the cumulative effects of other Anderson AFB projects. See comment under Infrastructure.
- Provide a funding mechanism for off-base residences within the new 65+ dBA noise contours under the project, to be used for noise reduction mitigation measures identified above.

Biological Resources

Mariana fruit bat and Mariana crow

The last known roosting colony of the endangered Mariana fruit bat is located near Pati Point. The colony has fewer than 30 individuals, is declining steadily, and no juveniles are known to inhabit the colony. The invasive Brown Tree Snake (BTS) is the main cause of this decline. However, the substantial addition of aircraft flying over the colony from the proposed project is of concern. According to Table 4.5-5, it appears that aircraft events over Pati Point will increase from 2 flights per day to 53 flights per day (or from 110 to 169 per day, the table is unclear). In addition, the bat will also lose 142 acres of foraging habitat from the clearing of vegetation in the Aircraft Staging Area (ASA) and the Commercial Gate Area, 3.5 acres of which is considered higher quality and located in two areas of intact secondary forest (p. 4-65). There are less than 15 endangered Mariana crows on Guam (p. 3-51). The project will clear 142 acres of nesting habitat, 3.5 of which is considered most suitable (p. 3-52, 4-65), and aircraft operations and construction will be close to potential nesting sites of the Mariana crow (p. 4-73).

Since Mariana crows react negatively to aircraft overflight noise (p. 4-65), the increased noise of the project will impact the crow.

We assume the 3.5 acres identified as higher quality habitat for both the Mariana fruit bat and the endangered Mariana crow are within the Neisosperma-Macaranga Forest to the north as identified in Figure 3.5-1. This figure shows a perimeter road planned through a large section of this forest type, further fragmenting the forest and adjacent areas. Since the endangered Mariana crow prefers nesting in trees greater than 290 meters from roads, creating new road corridors through crow nesting habitat should be avoided.

Project impacts to these species, in the context of existing cumulative impacts, appear to be significant and we have considerable concerns regarding the ability of these species to withstand the burden of additional impacts. Additional efforts to minimize these impacts are appropriate.

Recommendations:

We understand that the construction footprint has already been altered to reduce clearance in intact forest (p. 2-28). We are confident that Air Force planners have the skill to further adjust the footprint to protect the patches of higher quality habitat (totaling 3.5 acres), and to realign the road from a perimeter concept to one within the area already to be cleared for the ASA. The FEIS should also provide a map that identifies the locations of the 3.5 acres of higher quality forest.

The DEIS acknowledges that noise from overflights would affect Mariana fruit bat and Mariana crow recovery efforts (p. 4-69). The Air Force proposes an adaptive management strategy to address the uncertainties regarding noise impacts on these species, focusing on the fruit bat (p. 2-35), but little information is provided as to how this program will operate. The FEIS should provide more information regarding this strategy, preferably including the strategy as an attachment to the FEIS. At a minimum, the FEIS should identify the key elements of the adaptive management strategy including: monitoring objectives and timelines; information needs; needed financial, technical, and human resources; identities of responsible parties; the process for evaluating monitoring results including indicators and criteria; the process for altering management decisions; the data management process; and the process for communicating results.

In addition, we have the following recommendations to mitigate impacts to biological resources:

- The DEIS makes clear the importance of preventing the spread of the BTS and notes that BTS control is a priority for the Department of Defense (DoD). The Air Force plans to carry out 100% inspection of out-bound craft and states that all aircraft, military or civilian, taking off from Anderson AFB will be inspected by the U.S. Department of Agriculture to the maximum extent possible. However, it does not indicate whether or how shipments that originated from Anderson AFB but depart from other ports will be inspected. The FEIS should identify how this

control will occur, identify the appropriate funding levels needed to accomplish this task, and indicate whether this funding will occur as part of the project. Funding commitments should be included in the ROD.

- The DEIS suggests transplanting of *Tabernaemontana rotensis* seedlings and saplings (p. 2-30) but does not commit to this reforestation effort. We recommend this conservation measure be adopted and more detail, including locations, be provided in the FEIS. A clear commitment to its implementation should be included in the project ROD.
- The DEIS notes that the conservation measures identified for this project are sometimes the same as those already identified for the concurrent Northwest Field Training project previously analyzed in an Environmental Assessment. We recommend any conservation measures identified for the Northwest Field Training project also be included as mitigation measures in the ROD for this project. This would include the creation of a new Habitat Management Unit (HMU) for ecological studies.
- The preferred Alternative A includes development of 190 units of family housing. According to Figures 3.5-5 and 2.2-3, this housing would be located in the overlay refuge. We recommend Alternative B which avoids these impacts while still meeting the project purpose and need. If the Air Force selects Alternative A, we recommend relocating housing to an area within the existing developed footprint.

Other Infrastructure

Solid waste

The DEIS states that the AFB landfill will reach capacity in September 2007 (p. 3-23). GovGuam intends to have a new landfill in operation by September 2007 and Anderson AFB will use that landfill. If that project becomes delayed, Anderson AFB has a separate project that will expand the existing landfill by 2 acres and extend the lifespan of the landfill to 2009. If the GovGuam landfill does not become available, the Air Force plans to expand the landfill to serve beyond 2009 (p. 4-36).

We understand that the GovGuam landfill has become delayed. Therefore, the 2-acre expansion would be necessary. It is not clear whether GovGuam will issue permits for a landfill expansion project that is located over a Sole Source Aquifer, however. More discussion is needed to address aquifer contamination concerns and permitting limitations.

The DEIS references Anderson AFB's aggressive pollution prevention program and plans for recycling construction and demolition debris (p. 4-36), but does not mention efforts to recycle the increase in municipal solid waste from the additional 3000 personnel and the additional 1800 migrant laborers should they reside on-base. No info is provided about residential recycling programs, what materials are recycled, or what the current recycling rate is. It is not clear whether the current waste generation rate used in the impact analysis (2.5 lbs per person, p. 3-24)

includes the recycling rate.

Recommendation:

In the FEIS, provide an update on discussions with GovGuam regarding the landfill expansion. Indicate the likelihood of obtaining the necessary permits from GovGuam for a landfill expansion project on Anderson AFB to serve until 2009 and possibly beyond. Identify impacts to the Sole Source Aquifer from the existing and future landfill operations.

Identify the probable disposal location for waste generated by the 1,800 migrant laborers, both on and off-base. Provide information on the existing residential recycling program including the current recycling rate. Indicate whether the waste generation rate includes recycling efforts. Identify what actions are needed to increase the recycling rate on the Base, and include waste diversion goals and timelines.

Water supply/groundwater recharge

The potable water at Anderson AFB is supplied by a system of 9 existing wells and 10 new wells under construction (p. 3-20). The proposed project would result in an increase in consumption of 51%, and combined with other projects on Anderson AFB, an increase of 83%. The impact analysis does not appear to include the water that will be consumed by the 1,800 migrant laborers that the project would require (p. 4-89) in either the project or cumulative impacts analyses. The document also does not indicate what water conservation measures are proposed for this substantial increase in water use on the Base.

The DEIS does not mention that the Northern Guam aquifer has been designated by EPA as a Sole Source Aquifer under the Safe Drinking Water Act (SDWA). As the sole source of drinking water, it is important to take measures to avoid contamination of the aquifer. As mentioned above, the raw sewage backup problem identified in the DEIS is a concern for groundwater contamination to the Sole Source Aquifer. Improvements to the wastewater collection system are not explicitly mentioned in the project list in Tables 2.2-3 and 2.2-4.

Recommendation:

In the FEIS, include water consumption by the migrant labor force in the calculation of consumption for the project and in the cumulative impacts analysis. Identify water conservation measures and commit to their implementation in the ROD.

Identify the Northern Guam aquifer as a Sole Source Aquifer and provide a brief description of this program. Discuss what actions are being taken to remedy the raw sewage overflows into the storm runoff collection basin and into injection wells leading to the aquifer.

Transportation

The DEIS includes a description of the roadway network but does not include a road map. It also indicates that the existing transportation system is adequate to meet present needs (p. 3-24) but it is not clear whether it will be adequate to meet the future cumulative demand, which would

almost double the number of vehicles using Route 9 each day (p. 4-47). The DEIS mentions a traffic study (p. 3-25) but no information is provided as to the existing level of service (LOS)³ at roadway segments or intersections. There is mention of short-term congestion, but no mitigation is included. Instead the document states that the congestion would be eliminated when the project activity is completed. Project activities are expected to occur over an 8-year period (p. 2-13).

Recommendation:

In the FEIS, provide a road map showing the routes and street names referenced in the Transportation section. Include more information, if known, regarding the existing LOS for applicable sections of Route 9 and key roadway segments and intersections within or leading to the Base. Estimate changes in LOS or impacts to Route 9 and indicate whether the current network is sufficient to meet future cumulative needs. Adopt mitigation measures to eliminate congestion during project construction. Mitigation should include the development of construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow. Include this mitigation in the ROD.

Schools

The cumulative impacts of population increases from this and other projects on Anderson AFB will result in the need for additional schools. The list of projects associated with the preferred alternative only includes a new high school (Tables 2.2-3 and 2.2-4). The DEIS states that the elementary and middle school system has just over 200 vacancies, but the cumulative projects will require vacancies in these schools for over 725 students (p. 4-99).

Recommendation:

The scope of the EIS should include the analysis of impacts from all connected actions (40 CFR 1508.25). In the FEIS, identify all necessary school facility expansions, include these expansions in Tables 2.2-3 and 2.2-4 and Figures 2.2-3 and 2.2-4, and analyze the environmental impacts from these actions.

Air Quality

Diesel Emissions / Construction Emissions Mitigation

The DEIS discusses and quantifies expected construction and operational emissions for the project and for other projects on Anderson AFB. The DEIS does not discuss health impacts from diesel emissions or hazardous air pollutants (air toxics) associated with the project.

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

³ Refers to a standard measurement used by transportation officials which reflects the relative ease of traffic flow on a scale of A to F, with free-flow being rated LOS-A and congested conditions rated as LOS-F.

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 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.

Federal Leadership in Sustainable Building

The project involves substantial new construction of facilities. There is no mention of the Executive Order (E.O.) 13123 – Greening the Government through Efficient Energy Management (p. 2-19) which supports energy efficiency, water conservation, and the use of renewable energy products by the federal government, providing specific goals towards these ends. 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 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 E.O. 13123 and the MOU for high performance and sustainable buildings are followed for all new construction. The FEIS should:

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

These commitments should be specified in all contracts and documented in the FEIS and the ROD.