UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
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OFFICE OF THE
REGIONAL ADMINISTRATOR

August 4, 2008

Ms. Lynne Neuman
HQ AFSPC/A4/7PP
150 Vanderberg Street, Suite 1105
Peterson AFB, CO 80914-2370

Re: Draft Supplemental Environmental Impact Statement for the PAVE PAWS Early Warning Radar Operation, Cape Cod Air Force Station, Massachusetts (CEQ # 20080239)

Dear Ms. Neuman:

The Environmental Protection Agency (EPA) has reviewed the United States Department of the Air Force's (Air Force) Draft Supplemental Environmental Impact Statement (DSEIS) for the PAVE PAWS Early Warning Radar Operation at the Cape Cod Air Force Station in Barnstable County, Massachusetts. We submit the following comments on the DSEIS in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The DSEIS for the PAVE PAWS radar was prepared by the U.S. Air Force to address the concerns of the local community about possible health effects from the PAVE PAWS operation. The criteria EPA used in evaluating the DSEIS are (1) the measured radiofrequency (RF) radiation exposure levels beyond the boundaries of PAVE PAWS radar site at locations accessible to the public, and (2) the exposure guidelines used by the Federal Communications Commission (FCC) to protect the public from adverse health effects that might result from exposure to the RF radiation emitted by the systems regulated by the FCC.

Based on our review of information provided in the DSEIS we conclude the following:

- The time-averaged radiofrequency (RF) radiation power density measured at 50 various locations on Cape Cod, accessible to the public beyond the radar installation's perimeter fence, with the exception of one location, are at and below 5 microwatt per square centimeter. These levels are well below the protective exposure standards used by the Federal Communications Commission (FCC) found in FCC/OET Bulletin 56, August 1999. http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf.

- The one location noted is at Shawme Crowell State Park where the measured time-averaged power density was measured as 34.6 microwatt per square centimeter, still below current standards. The maximum permitted power density, used by the Federal Communications Commission to protect the public from adverse health effects from RF radiation in the frequency range of the PAVE PAWS radar is, 280 microwatts per square centimeter. This exposure guideline was recommended to the FCC by EPA in November 9, 1993.

In addition to radiofrequency (RF) environmental exposure measurements, EPA reviewed available scientific evidence presented in the DSEIS. These included a 2005 report from the National Academies' National Research Council that concluded that "there is no evidence of adverse health effects to Cape Cod residents from long-term exposure to radiofrequency energy from a nearby U.S. Air Force radar installation."

Since the possible exposures, at locations on Cape Cod that are accessible to the public, comply with the standards that are used by the FCC to regulate telecommunications systems, the DSEIS's conclusions regarding the health affects of the operation of the PAVE PAWS radar are reasonable.

Based on our review of the DSEIS we have rated the DEIS "LO-1—Lack of Objections-Adequate" in accordance with EPA's national rating system, a description of which is attached to this letter. Please contact Timothy Timmermann (617-918-1025) of EPA's Office of Environmental Review with any comments or questions about this letter.

Sincerely,

Elizabeth A. Higgins, Director
Office of Environmental Review

Attachment

Summary of Rating Definitions and Follow-up Action

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 analyzed 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 analyzed in the draft EIS, which should be analyzed 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.