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

November 22, 2010

Adrianne Saboya
Naval Facilities Engineering Command, Southwest
1220 Pacific Highway
San Diego, CA 92132-5190

Subject: Final Environmental Impact Statement for United States Marine Corps F-35B West Coast Basing, California and Arizona (CEQ # 20100417)

Dear Ms. Saboya:

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 our NEPA review authority under Section 309 of the Clean Air Act.

EPA reviewed the Draft Environmental Impact Statement (DEIS) and provided comments to the Marine Corps on July 12, 2010. We rated the DEIS as Environmental Concerns - Insufficient Information (EC-2) due to significant noise impacts to sensitive receptors near MCAS Yuma and the absence of identified mitigation measures. Based on our review of the FEIS, EPA continues to have concerns regarding significant noise impacts, including impacts to schools.

The preferred alternative would result in an increase of over 3,800 people (an 89% increase in the population) who would be exposed to significant noise impacts (≥ 65 decibels (dB) day-night average sound level (DNL), with 707 of these experiencing impacts above 75 dB DNL, a level at which hearing loss can occur (Appendix II, p. C-575). Because of these significant impacts, EPA recommended providing a funding mechanism for soundproofing off-base residences within incompatible land use zones; requesting authorization from Congress, if necessary, to fund such off-base noise mitigation measures; and exploring the acquisition of property interests from willing sellers among the 707 residents who would experience DNL levels above 75 dB. The FEIS response to comments states that there is no existing Department of Defense (DoD) program that permits appropriated funding for off-base sound attenuation; but did not respond to our recommendation to request Congressional authorization for such funding. Because of the significance of noise impacts from the basing of F-35s around the country, we recommend that the Marine Corps explore the establishment of a new DoD program to address and mitigate significant off-base noise impacts. Additionally, the acquisition of property interests from willing sellers for residents experiencing DNL levels above 75 dB appears consistent with the Navy's Air Installations Compatible Use Zones (AICUZ) Program Procedures and Guidelines (OPNAV INSTRUCTION 11010.36B).

We are especially concerned regarding the noise impacts to schools near MCAS Yuma. Three schools that are already subject to noise levels greater than 65 dB DNL will experience a 5 dB increase under the preferred alternative. Such high noise levels are almost certainly an acoustical barrier to learning. Studies have linked high levels of classroom noise to reduced scholastic achievement[1]. In addition, the FEIS cites studies in the literature implicating noise effects on blood pressure levels in children and on hearing loss (Appendix II, p. C-582). Executive Order (EO) 13045, Protection of Children from Environmental Health Risks and Safety Risks (1997) directs federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and to ensure that their policies, programs and activities address these risks. The Record of Decision (ROD) should address compliance with this EO and, consistent with 40 CFR 1505.2 (c), state whether all practicable means to avoid or minimize environmental harm from the selected alternative have been adopted, and if not, why not.

We appreciate the statement in the FEIS that the Marine Corps intends to identify all schools impacted in zones above 65 dB DNL and make a preliminary assessment of their existing condition for appropriate Noise Level Reduction, as identified in the AICUZ program, and to commit to working with the community, Federal Aviation Administration, and the State of Arizona for funding to reduce noise impacts to levels consistent with the AICUZ guidelines. We recommend that the ROD provide additional specifics for this coordination and commit to a specific timeframe for completing the preliminary assessment and appropriate follow-up.

The FEIS also states that the Marine Corps intends to conduct a subsequent noise evaluation, as a follow-up to the noise analysis in the EIS, to validate operational profiles and noise levels and address those results through the AICUZ program (p. 12-18). It is not clear how these impacts would be addressed through this program. The FEIS states that the Marine Corps recognizes the value of monitoring and adaptive management; however, there is no description of the adaptive management process nor mitigation measures identified that could be used to respond to unfavorable monitoring results. We recommend a more detailed and defined noise program be developed and committed to in the Record of Decision (ROD), indicating the provisions for monitoring noise and the procedures for making necessary adaptations.

Finally, as a mitigation measure, we recommend that public notification occur and information be distributed to all community members residing in newly created incompatible land use zones as a result of the project. The notification could provide a warning of expected noise increases, explain that the Marine Corps considers residential land use incompatible with this increase, and provide recommendations for homeowners on ways to reduce noise in their homes. For residents and homeowners in the new 65+ DNL contour, the notification could indicate whether the increased noise could put limitations on future Department of Housing and Urban Development mortgage insurance and Veterans Administration loan guarantees.

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[1] Studies are discussed in the ANSI S12.60-2002 American National Standard, *Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools*

EPA appreciates the opportunity to review this FEIS. 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)

cc: Darwin Stiffler, Superintendent, Yuma School District