UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 15, 2009

Naval Facilities
Engineering Command Southwest,
Attn: Adrianne Saboya, JSF West EIS Project Manager
1220 Pacific Highway,
San Diego, California 92132-5190

Subject: Draft Environmental Impact Statement (Draft EIS) for the West Coast Basing of the MV-22 Tilt Rotor Aircraft (CEQ # 20090045)

Dear Ms. Saboya:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft EIS for the proposed basing of the MV-22 Osprey tilt-rotor aircraft in the Western United States 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. Our comments were also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (Guidelines) promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act (CWA).

We have rated the Draft EIS as Environmental Concerns - Insufficient Information (EC-2) due to concerns regarding air quality and noise impacts. A Summary of EPA Rating Definitions is enclosed. Through the enclosed detailed comments, EPA recommends additional measures to reduce impacts.

EPA appreciates the opportunity to review this Draft EIS. 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) 972-3521, or contact Connell Dunning, the lead reviewer for this project, at 415-947-4161 or dunning.connell@epa.gov.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office

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

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Air Quality Impacts

Emissions Budget Documentation

The Draft EIS provides a detailed discussion of ambient air conditions (baseline/existing conditions), National Ambient Air Quality Standards (NAAQS), criteria pollutant nonattainment areas, and potential air quality impacts of the project (including cumulative and indirect impacts) for each alternative. The document states that because all anticipated emissions in nonattainment areas fit within the emissions budget allowed for military operations in the San Diego Air Basin, there will be no significant impacts to air quality for the preferred alternative basing location at Marine Corps Air Station (MCAS) Miramar and MCAS Pendleton. Although there is a reference to a letter from San Diego Air Pollution Control District indicating that the project emissions fit within the military budget, the letter is not included in the Draft EIS nor is it included in the references listed in Appendix B.

Recommendation:

Include the letter from the San Diego Air Pollution Control District cited in Appendix B (B.2-12) and confirm in the Final EIS that emissions fit within the military budget as stated.

Mitigation Measures

The Draft EIS states that because the proposed project emissions fit within the military programs emissions budget allowed in the San Diego Air Basin, no mitigation measures are warranted to reduce air quality impacts due to operational activities. We note that the activities associated with the proposed action will result in emissions of $PM_{2.5}$ (fine particulate matter) and diesel exhaust, as well as emissions that would exceed the annual NOx emission significance threshold within the San Diego Air Basin. EPA recommends that the Navy commit to additional measures to reduce air quality impacts, even if the proposal will not result in exceedances of the military emissions budget. We note that Council on Environmental Quality NEPA 40 Most Asked Questions (#19a) states the following:

> *The mitigation measures discussed in an EIS must cover the range of impacts of the proposal. The measures must include such things as design alternatives that would decrease pollution emissions, construction impacts, esthetic intrusion, as well as relocation assistance, possible land use controls that could be enacted, and other possible efforts. Mitigation measures must be considered even for impacts that by themselves would not be considered "significant." Once the proposal itself is considered as a whole to have significant effects, all of its specific effects on the environment (whether or not "significant") must be considered, and mitigation measures must be developed where it is feasible to do so. Sections 1502.14(f), 1502.16(h), 1508.14.*

Recommendations:

In light of the serious health impacts associated with $PM_{2.5}$ and diesel exhaust exposure, we recommend that the best available control measures for these pollutants be implemented at all times and that a Construction Emissions Mitigation Plan is incorporated into the Draft EIS. We recommend that all requirements under San Diego Air Pollution Control District Guidelines and the following additional measures be incorporated into a Construction Emissions Mitigation Plan, where feasible and appropriate, in order to reduce impacts associated with fugitive dust and emissions of $PM_{2.5}$, diesel exhaust, and mobile source air toxics from construction and operations associated with this project.

Fugitive Dust Source Controls:

- 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:

- Minimize use, trips, and unnecessary idling of 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. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, commit to the best available emissions control technology. Tier 4 engines will be available in the 2009-model year and should be used for project construction equipment to the maximum extent feasible. Lacking availability of non-road construction equipment that meets Tier 4 engine standards, the Navy should commit to using the best available emissions control technologies on all equipment.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative controls:

- Specify the means by which impacts to sensitive receptors, such as children, elderly, infirm, and others identified in the Final EIS, will be minimized. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- 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.) Meet EPA diesel fuel requirements for off-road and on-highway, and, where appropriate, use alternative fuels such as natural gas and electric.

Greenhouse Gases

The Draft EIS identifies general measures that the Navy is taking to reduce greenhouse gas (GHG) emissions and includes a quantification of annual greenhouse gas emissions on page 8-17. However, the document does not identify any specific measures associated with the proposed project to reduce greenhouse gas emissions.

Recommendations:

EPA recommends that the Final EIS identify specific mitigation measures that would 1) protect the Project from the effects of climate change, 2) reduce the Project's adverse air quality effects, and/or 3) promote pollution prevention or environmental stewardship. Any design and operation measures that can be identified as reducing GHG emissions should be identified in the Final EIS with an estimate of the GHG emissions reductions that would result if measures were ultimately implemented. Because the preferred alternative includes operations and construction at MCAS Miramar and MCAS Pendleton, any specific mitigation measures to reduce GHG emissions are important to note in relation to California's Global Warming Solutions Act of 2006.

Land Use and Noise Impacts

The Draft EIS states that unmitigated impacts to land use surrounding MCAS Miramar will result due to increased noise affecting residential, commercial, and recreational complexes (page 8-11) and that the population within the 65 dB CNEL contour would increase. The Draft EIS does not state why these impacts cannot be mitigated and does not identify mitigation measures that were considered and determined to not be feasible. EPA encourages the Navy to incorporate additional mitigation measures to reduce noise impacts to the surrounding communities if feasible, such as reduced operations during the evening period and commitments for additional soundproofing for affected receptors. EPA also encourages the Navy to consider

the benefits of collaboration in addressing noise impacts to the community. The Council on Environmental Quality, by releasing new guidance on Collaboration in NEPA[1], has communicated the need for Federal agencies to better engage interested parties in collaborative environmental analysis and federal decision-making. We understand national security issues would limit some opportunities to collaborate, but we anticipate that some opportunities with other interested parties may exist, such as in developing a suite of mitigation measures to offset significant impacts and/or in joint fact-finding (an inclusive and deliberative process to foster mutual learning and resolve disputes over scientific and technical issues).

Recommendation:

EPA encourages the Navy to identify any additional mitigation measures available to mitigate increased noise impacts from the proposed basing at MCAS Miramar. We recommend collaboration with interested outside parties where possible, especially in the development of mitigation to offset significant impacts and in joint fact-finding to resolve disputes over scientific and technical issues.

[1] Available: http://www.nepa.gov/ntf/Collaboration_in_NEPA_Oct_2007.pdf

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (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

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 these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should 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

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 potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (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 of 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 National Environmental Policy Act 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.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.