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

June 18, 2015

Nora Macariola-See
Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96869-3134

Subject: Final Environmental Impact Statement for the Mariana Islands Training and Testing (MITT), Commonwealth of the Northern Mariana Islands (CNMI) (CEQ # 20150136)

Dear Ms. Macariola-See:

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 Department of Defense (DoD) on December 12, 2013. We rated the DEIS as Environmental Concerns - Insufficient Information (EC-2), primarily due to concerns regarding erosion from increased bombing of Farallon De Medinilla (FDM) and the impacts that the resulting increased sedimentation could have on corals that surround the island.

We appreciate the figure added to the FEIS that shows the distribution and percent cover of corals surrounding FDM, as we recommended. The FEIS also includes results from dive surveys the Navy conducted since 1999 (p. 3.1-26). According to the FEIS, impacts to the physical environment clearly attributable to military training activities were noted in 2007, 2008, 2010, and 2012 (p. 3.1-27), but the FEIS states that the coral fauna at FDM during these surveys was observed to be healthy and robust (p. 3.3-33). This statement appears to be contradicted in the 2012 dive report[1], which documents a severe coral barnacle infestation and identifies it as a "significant adverse change". The dive report concludes that this is not a result of military training; however, this conclusion is based solely on the fact that these barnacles were also found on a reef north of FDM. The dive report suggests, as a possible explanation, that the presence of high densities of barnacles indicates the corals are "*highly impacted by other stressors*", noting that, "*Coral barnacles can be likened to an "opportunistic infection" that are merely indicative of a "weakened immune system".* It further states, "*It's these unknown stressors that are causing the Pocillopora to die*" (dive report p. 24). The presence of these barnacles on a reef north of FDM does not preclude the possibility that increased sedimentation and/or the presence of munitions constituents are contributing to the weakened immune system of the corals at FDM.

[1] NAVFAC, April 2013. *Calendar Year 2012 Assessment Of Near Shore Marine Resources At Farallon De Medinilla, Commonwealth of the Northern Mariana Islands*, Available: http://mitt-eis.com/DocumentsandReferences/EISDocuments/SupportingTechnicalDocuments.aspx

In addition, observations of existing coral health do not demonstrate that a training increase of the magnitude proposed would have a less than significant effect on corals surrounding FDM. The Proposed Action would include a substantial increase in the use of explosive munitions on FDM. The number of bombs dropped on land targets annually at FDM would increase three-fold (from 2,150 to 6,242). DoD also proposes to increase explosive missile use annually by 42% (from 60 to 85), introduce 2,000 explosive rockets not currently used, increase explosive grenades and mortars by 500% (from 100 to 600), and increase small-caliber rounds by 1,348% (from 2,900 to 42,000) (p. 3.0-42). These actions have the potential to greatly increase erosion and sedimentation. We recommend that the Record of Decision commit to annual dive surveys to continue to monitor the marine resources and the coral barnacle infestation at FDM, and that results from these surveys be made available to government agencies and the public.

In our comments on the DEIS, we noted that the range condition assessment did not assess the fate and transport of sediment, including munitions constituents, from FDM. We recommended that the FEIS discuss the results of the 5 year reassessment, if available. The FEIS does not indicate whether an update to the range condition assessment occurred. The previous assessment, dated May 2008, estimated source loading of residual munitions constituents at the range, but concluded that no further analysis was warranted since its uninhabited location poses no risk to human receptors[2]. As we commented on the Mariana Islands Range Complex DEIS[3], ecological receptors, in addition to human receptors, should be considered in the range condition assessments. Additionally, there is a potential for human receptors via a fish consumption pathway, which is not recognized in the range condition assessment conclusion. The FEIS notes that the waters surrounding FDM have been and continue to be an important area for local fishers (p. 3.12-22). The 2012 dive report (p. 41) identified evidence of increased fishing pressure at FDM and discussed possible causes, including increased enforcement of fishing restrictions around Saipan and Tinian and a general economic downturn in CNMI since 2010. In addition, while the 2008 range condition assessment had already acknowledged aerial bombing and ship bombardment training activities at FDM as "a significant source of munitions constituents" (p. ES-14), the Proposed Action would introduce 2,000 rockets per year at FDM not previously used there. According to the FEIS, rockets have a failure rate of almost 4% (Table 3.1-4), which leaves unconsumed explosives in the environment (p. 3.1-20). We recommend that future range condition assessments evaluate the fish consumption pathway, including potential sampling of fished species for munitions constituents, and that a commitment to this evaluation be included in the Record of Decision.

EPA appreciates the opportunity to review this FEIS. When the Record of Decision is signed, please send a copy to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 972-3521, or contact Karen Vitulano, the lead reviewer for this document, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

Kathleen Martyn Goforth, Manager
Environmental Review Section

[2] NAVFAC, May 2008. *Final Range Condition Assessment Marianas Land-Based Operational Range Complex Decision Point 1 Recommendations Report Guam and Commonwealth Northern Mariana Islands*, May 2008. Executive Summary available: http://www.denix.osd.mil/sri/upload/Final-Marianas-DP1-ES-Official.pdf

[3] EPA comment letter on the Mariana Island Range Complex (MIRC) DEIS, March 26, 2009