UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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December 29, 2008

Mr. Kent Randall
Naval Facilities Engineering
Command Southwest
Code OPME
2730 McKean St. Bldg. 291
San Diego, CA 92136-5198

Subject: EPA comments on the Southern California Range Complex Final Environmental Impact Statement (FEIS), California (CEQ # 20080495)

Dear Mr. Randall:

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.

The Final EIS/OEIS (herein FEIS) assesses the impacts of current and increased Navy training, and research and development activities in the Southern California Range Complex (SOCAL Range Complex), which includes over 120,000 square nautical miles (nm^2) off the coast of Southern California including near-shore areas, open ocean, and land on San Clemente Island. The Range Complex includes several biologically rich areas in the Southern California Bight including a portion of the Channel Islands National Marine Sanctuary.

EPA reviewed the Draft Environmental Impact Statement (DEIS) and provided comments to the Navy on June 2, 2008. We rated the DEIS as Environmental Concerns - Insufficient Information (EC-2) due to impacts to marine resources, including mid-frequency active (MFA) sonar impacts to marine mammals. We recommended a precautionary approach be taken with regard to increases in the use of MFA sonar, commensurate with the scientific controversy, uncertainty, and unknown risks to marine mammals, including seven threatened or endangered species in the Range Complex. We also expressed concern regarding increased hazardous constituent releases to the ocean environment and requested additional information regarding efforts to minimize and reduce the amount of hazardous materials deposited into the ocean from training material expenditures. Additional comments regarded the limited range of alternatives, and Clean Air Act general conformity.

The FEIS does not contain substantive changes from the DEIS, and no significant changes were made to the proposed action and alternatives. The preferred alternative remains Alternative 2, which will substantially increase the scope and intensity of existing training, increasing annual training operations from 39,000 to 50,000 per year. Alternative 2 will also include the addition of major range events and will establish new underwater mine ranges.

We have continuing concerns regarding the following:

Alternatives

The range of alternatives continues to be limited and does not comport with the intent of the alternatives analysis requirement of NEPA. The Council on Environmental Quality (CEQ) regulations emphasize the importance of the alternatives analysis, stating it to be the "heart of the environmental impact statement" (40 CFR 1502.14). Agencies are directed "to the fullest extent possible" to use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment (40 CFR 1500.2).

EPA recommended the evaluation of additional alternatives and suggested the inclusion of an alternative with additional mitigation measures such as seasonal and geographical exclusions from biologically important areas (40 CFR 1502.14(f)). The Navy's response to comments acknowledges that there is some variability in where the Navy major exercises may occur within the SOCAL Range Complex (p. 10-83). We continue to recommend that the Navy plan its training to avoid times and areas known to contain high concentrations of marine mammals, such as local foraging hotspots, whale migration routes, and in the Channel Islands National Marine Sanctuary.

The Navy's response to our comments explained why a reduction in training was not suitable. Please note that we did not recommend a reduction in training. The FEIS, however, states that existing levels of training (No Action Alternative) generally satisfies fleet training requirements (p. 2-20) and thus partially meets the project purpose and need. We recommend the Navy consider selection of this alternative. Furthermore, the ROD should identify the No Action Alternative as the environmentally preferable alternative per 40 CFR 1505.2(b).

MFA Sonar

The FEIS repeatedly states that anti-submarine warfare (ASW) activities have occurred for decades, implying that the proposed action is simply a continuation of existing conditions. It must be noted however, that the Navy's preferred alternative will substantially increase training frequency and intensity. These increases will occur in a context different than previous decades, since, as acknowledged in the FEIS (p. 4-27), anthropogenic noise in the ocean has increased over the last 50 years. The FEIS cites an observed increase in ocean ambient sound from the 1960's to the 1990's[1]. The National Research Council advises that the evaluation of potential effects of underwater sound on the marine environment must consider both ambient noise and noise from identifiable sources[2]. The FEIS does not appear to consider these cumulative impacts in its impact assessment conclusions.

We remain concerned with the predicted impacts to marine mammals from MFA sonar use under the preferred alternative for the following reasons:

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[1] FEIS cites Andrews et al (2002) who measured an increase in ambient noise of approximately 10 decibels (dB) in the frequency ranges of 20 - 80 hertz (Hz) and 200 – 300 Hz, and about 3 dB at 100 Hz, over the 33-year period.
[2] National Research Council, 2003, *Ocean Noise and Marine Mammals*. Available: http://books.nap.edu/openbook.php?record_id=10564&page=R1

- The Navy's analysis predicts 112,884 marine mammals will be behaviorally harassed, 10,897 marine mammals will experience temporary hearing loss, 19 marine mammals will experience permanent hearing loss, and no mortalities will result. The basis for concluding no mortalities will result is unclear considering the important role hearing plays in communication, navigation and foraging (p. 3.9-90). It seems the large numbers of animals experiencing Level B harassment (behavior and temporary hearing loss) could even have significant consequences. According to the National Marine Fisheries Service (NMFS) 2007 Biological Opinion on the effects of Composite Training Unit Exercises and Joint Task Force Exercises, acoustic exposures can result in the death of an animal by impairing its foraging, ability to detect predators or communicate, or by increasing stress, and disrupting important physiological events (B.O. p. 101).

- The Navy has not identified efforts to minimize MFA sonar use in ASW training, and, instead, proposes to increase it by 12% over the amount currently used in the SOCAL Range Complex, one of the most productive ocean systems in the world (73 Federal Register 199 (14 Oct 2008), p. 60846).

- The mitigation measures are limited and depend on visual observation, despite the FEIS disclosure that deep-diving marine mammals such as beaked whales have a low probability of detection.

- No consideration of geographic or seasonal exclusions was included, despite the Navy's acknowledgement that there is some variability in where the Navy major exercises may occur within the SOCAL Range complex (p. 10-83).

Impacts to Water Resources

The Navy declined to identify mitigation measures for impacts to water quality from expenditures of ordnance and other training materials into the ocean. The preferred alternative would nearly double the release of hazardous constituents to the ocean from sonobouys from 18,600 lbs per year to 35,200 lbs per year, plus increased expenditures of lead from torpedo ballasts/hose and other training items. EPA requested the Navy identify what practices or procedures would be implemented to minimize the release of hazardous materials into the ocean from ordnance and other training materials. The Navy responded that it has refined its training practices over the years to reduce its use of hazardous materials in training and no additional measures to reduce these deposits are necessary. Please be aware that good pollution prevention practice requires ongoing assessments so new opportunities to reduce pollution can be identified. Since the information EPA requested was not disclosed in the FEIS, we request a meeting or conference call to learn more about the Navy's past efforts at minimizing these releases.

We remain concerned regarding the increase in hazardous constituents entering the ocean environment. Because of the cumulative impacts to ocean water quality, good stewardship can no longer assume that the size of the ocean will dilute and disperse all pollutants to safe levels, especially considering that metals such as copper and lead bioaccumulate in marine organisms. We recommend ambient monitoring of range areas to validate conclusions that impacts would not violate water quality standards. The training practices should be carried out in compliance with requirements of the Clean Water Act, which prohibits the discharge of pollutants into Waters of the United States without a National Pollutant Discharge Elimination System (NPDES) Permit.

Supplementing the EIS

The FEIS indicates that the methodology the Navy used to assess impacts from MFA sonar was based on admittedly "sparse data" consisting of 3 data sets (p. 3.9-119) representing only four species, with one of the data sets using acoustic stimuli dissimilar to the Navy's MFA sonar, and another involving inconsistent and anecdotal observations ((p. 3.9-120). The Navy acknowledges that behavioral responses to sonar can vary significantly by species. Given this admitted weakness in the risk function, future studies could yield results with the potential to significantly bear on the impact assessment methodology and conclusions.

CEQ guidance, referencing 40 CFR 1502.9(c), states that if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, a supplemental EIS must be prepared so that the agency has the best possible information to make any necessary substantive changes in its decisions regarding the proposal. CEQ also suggests agencies reexamine EISs that are more than 5 years old[3]. We note that the NMFS proposed rule regarding the taking of marine mammals for the SOCAL Range Complex[4] requires a comprehensive report that analyzes and summarizes all of the multi-year marine mammal information gathered during ASW and explosive exercises, to be submitted to NMFS at the end of the fourth year of the rule (December 2012). The preparation and review of this report will provide valuable information useful in a reassessment of the EIS. EPA recommends the Navy commit to EIS reassessment for supplementation coincident with each NMFS permit cycle.

EPA appreciates the opportunity to review this FEIS. We would like to set up a conference call so that EPA can receive the information requested in this letter. We will be contacting you early in the new year. Alternatively, 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, to schedule a meeting at your convenience.

Sincerely,

Kathleen for

Kathleen M. Goforth, Manager
Environmental Review Office (CED-2)

[3] Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, Question No. 32. 46 Federal Register (1981) p. 18026

[4] 73 Federal Register (2008), p. 60876