

US EPA ARCHIVE DOCUMENT



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

November 29, 2012

Ms. Kelly Finn
CMAGR LEIS Project Manager
NAVFAC Southwest
1220 Pacific Highway, Building 1 Central IPT
San Diego, CA 92132-5190

Subject: Draft Legislative Environmental Impact Statement (DLEIS) for the Proposed Renewal of the Chocolate Mountain Aerial Gunnery Range Land Withdrawal, California (CEQ # 20120278)

Dear Ms. Finn:

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. Our detailed comments are enclosed.

The Draft Legislative Environmental Impact Statement (DLEIS) evaluates the potential environmental consequences of renewing the withdrawal of approximately 228,465 acres of public land for continued use as part of the Chocolate Mountain Aerial Gunnery Range (CMAGR) in Imperial and Riverside Counties, California. Public lands in the CMAGR are currently reserved for use by the Secretary of the Navy for testing and training for aerial bombing, missile firing, tactical maneuvering and air support, and other defense-related purposes.

Based on our review, we have rated the DLEIS's Proposed Actions as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). We are concerned that the potentially significant loading rates of munitions constituents at almost all of the target sites, as predicted by the Range Environmental Vulnerability Assessment (REVA), could present risks to offsite ecological receptors. The DLEIS does not provide sufficient information to support conclusions that off-range munitions migration is not occurring. The DLEIS does not disclose impacts from lead ammunition and munitions collected during range clearance. Our detailed comments also include recommendations for improving the impact assessment for the desert tortoise, a species that is experiencing significant pressures from large-scale solar energy development. Half of the CMAGR is designated critical habitat for the desert tortoise.

EPA appreciates the opportunity to review this DLEIS. When the Final LEIS is released for public review, please send one copy to the address above (mail code: CED-2). Please note that, as of October 1, 2012, EPA Headquarters no longer accepts paper copies or CDs of EISs for official filing purposes. Submissions on or after October 1, 2012, must be made through the EPA's new electronic EIS submittal tool: e-NEPA. To begin using e-NEPA, you must first register with the EPA's electronic reporting site –

https://cdx.epa.gov/epa_home.asp. 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,

/s/

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

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

cc: James Kenna, California State Director, Bureau of Land Management,
Jim Thied, U.S. Fish and Wildlife Service, Palm Springs Office
Chris Schoneman, Refuge Manager, Sonny Bono Salton Sea National Wildlife Refuge

Contamination with Munitions Constituents

Assessment of Off Range Impacts

The DLEIS does not provide sufficient information to support conclusions that off-range munitions migration is not occurring. The Marine Corps uses the Range Environmental Vulnerability Assessment (REVA), a fate and transport modeling/analysis of munitions constituents (MC), which is based on site environmental conditions and estimated loading rates. According to the DLEIS, the REVA performed in 2008 concluded that MC loading rates at 12 of the sites in the Chocolate Mountains Aerial Gunnery Range (CMAGR) North and all 15 of the sites in CMAGR South were found to be potentially significant (greater than 1 milligram per square meter per year)(p. 3-108). Despite this conclusion, no follow-up sampling or analysis was conducted; instead, the Marine Corps concluded that “because surface water in the washes draining from the CMAGR is not used as a potable water source, as an irrigation water source, or for any contact activity, either on range or off range, no human or ecological receptors were identified in the baseline” (p. 3-108). The pathways evaluated for the REVA included both surface water and groundwater. Since no complete exposure pathway was identified, it was assumed that there was no potential risk to human health or the environment.

The DLEIS does not provide any additional information regarding the REVA analysis, so it is unclear how ecological receptors were evaluated and conclusions regarding exposure pathways were determined. The DLEIS identifies a number of wildlife species that utilize desert washes in the area, including the threatened Mojave desert tortoise, the hoary bat, and many others¹, and indicates that numerous ephemeral surface water drainages occur throughout the CMAGR (p. 3-68), flow seasonally, and discharge to the Salton Sea and Colorado River. Figure 3-9 shows military bombing targets located directly in drainages. The Salton Sea appears to be less than 5 miles downstream from bombing targets and contains diverse wildlife, including bird species in the Sonny Bono Salton Sea National Wildlife Refuge.

The DLEIS states that CMAGR Explosives Ordnance Disposal (EOD) staff has reportedly observed submunitions (individual components of ordnance) along various washes within the installation boundary (p. 4-47). It also states that EOD clearances have not demonstrated that any “substantial” migration of MCs has occurred, but does not disclose the extent of migration that has been documented (p. 4-20). There is no discussion of the likely fate and transport properties for the indicator MCs² evaluated. RDX, HMX and perchlorate can persist in the environment for long periods of time and, because they are mobile within the environment, have the highest potential to migrate off range³. The

¹ The DLEIS states that a relatively large number of wildlife species utilize dry desert wash woodlands, including the side blotted lizard (*Uta stansburiana*), western whiptail lizard, zebra-tailed lizard, sidewinder, red-tailed hawk, Gambel’s quail (*Callipepla gambelli*), mourning dove, ladder-backed woodpecker (*Picoides scalaris*), verdin (*Auriparus flaviceps*), western flycatcher (*Empidonax difficilis*), cactus wren (*Campylorhynchus burnneicapillus*), warbling vireo (*Vireo gilvus*), Wilson’s warbler (*Wilsonia pusilla*), house finch (*Carpodacus mexicanus*), black-tailed gnatcatcher, white-crowned sparrow (*Zonotrichia leucophrys*), canyon bat (*Parastrellus hesperus*), coyote (*Canis latrans*), kit fox, mule deer, white-tailed antelope squirrel (*Ammospermophilus leucurus*), black-tailed jack rabbit, and desert cottontail (p. 3-70).

² Indicator MCs selected for the REVA program include octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX), hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), trinitrotoluene (TNT), and perchlorate.

³ Headquarters Marine Corps, *REVA Reference Manual for Baseline Assessments*, May 2009. p. 51

DLEIS does not disclose the MC concentrations at the range boundary predicted by the REVA, nor include monitoring data that confirm the lack of migration of MCs offsite. The DLEIS' conclusion that stormwater and sediment loads are not likely to be transported off range is based primarily on the low precipitation that occurs in the area (p. 4-16). However, while average rainfall amounts are low in the desert, when precipitation does occur, it often results in high velocity flows which are capable of significant sediment and water transport. The DLEIS states that "in most areas", sediment loads from ephemeral drainages do not appear to reach off-range receiving waters (p. 4-20), implying that there are some areas where this does appear to be occurring. Since deposition of munitions has been occurring at CMAGR since World War II, it appears that off range transport of MCs is not an improbability.

Recommendations: The FEIS should include more information to support its conclusions that off-range contamination by MCs is not occurring. Include details regarding the migration of MCs that has been documented, and the locations where sediment loads are reaching receiving waters. Identify the type and frequency of monitoring activities that occur at CMAGR and will occur in the future under the proposed actions.

Details of the REVA should be included in the FEIS and should address the specific wildlife species that utilize the range as ecological receptors. We note that the REVA procedure does not limit ecological receptors to only protected species. EPA recommends that the REVA model conclusions be validated with environmental sampling to confirm that off-range migration of MCs is not occurring, since loading rates were found to be potentially significant and there are valuable biological resources downstream.

Lead and small arms ranges

Potential for increased lead contamination was not assessed in the DLEIS. The CMAGR includes two special warfare training areas (SWAT-4 and SWAT-5) with small arms ranges, and there are rifle and pistol ranges adjacent to Camp Billy Machen (p. 2-9, p. C-3). Lead is the most prevalent (by weight) potentially hazardous constituent associated with small arms ammunition and has the potential to migrate in surface water pathways and be carried off range. Lead is geochemically specific regarding its mobility in the environment and lead migration should be assessed using site-specific conditions (i.e., geochemical properties) obtained by sampling. The DLEIS does not include even a qualitative assessment of lead migration. Lead and lead compounds are used for range activities and reported by the military under the Toxics Release Inventory, with over 40,000 lbs of lead used at CMAGR in reporting year 2010 alone (p. 3-107).

Recommendation: Include an assessment of the potential for off range lead contamination in the FLEIS. Discuss current lead management and disposal procedures and the environmental impacts of these activities.

Disposal of Range Clearance Munitions

The DLEIS lists the amounts of munitions and range clearance debris cleared from target areas in 2009 through 2011 when funding was made available for these activities (p. 3-27). Over 3,300 tons of munitions and range debris were cleared during this period. The DLEIS does not characterize this waste nor indicate its final disposition, which is necessary in order to determine if the material is still subject to off range migration.

Recommendation: Indicate the process for classifying recovered material and the final disposition of the 3,300+ tons of cleared munitions from 2009 through 2011, as well as the plan

to characterize, manage and dispose of munitions cleared in the future. The FEIS should include a commitment to meet Resource Conservation and Recovery Act (RCRA) requirements for managing these materials in the future.

Biological Resources

Impacts to Desert Tortoise

The DLEIS does not provide a complete assessment of impacts to the federally threatened desert tortoise. Designated critical habitat for the desert tortoise occupies about half of the CMAGR (p. 3-78). The U.S. Fish and Wildlife Service issued a Biological Opinion for military activities at the range in 1996 (p. 4-29). The DLEIS lists the desert protection measures prescribed by the 1996 BO, which include “take” reporting, annual reports, and the establishment of a wildlife management area with limited use zones where military activity is excluded. The DLEIS does not provide any information that was presumably collected pursuant to these protection measures to reflect actual impacts on the tortoise. This information, especially take reporting, is essential to assess impacts to this resource.

The DLEIS concludes that, in aggregate, military use within the low impact part of the range has provided important conservation benefits to desert tortoise and other native species, citing to an article by Stein et al. 2008⁴. This article is an overview of the benefits that some military installations provide endangered species in general. CMAGR is not mentioned, nor is the desert tortoise; therefore, it does not appear to be an appropriate basis for this site-specific conclusion.

The DLEIS does not discuss cumulative impacts to the desert tortoise. This species is experiencing significant cumulative impacts from multiple utility-scale renewable energy projects in the Mojave desert. The site-specific impacts identified for the proposed action should also be disclosed and evaluated in the context of the species as a whole (i.e. cumulative impacts), using an appropriate geographic boundary, such as the species’ recovery plan area.

Recommendation: In the FLEIS, disclose the results of the desert protection measures prescribed by the 1996 BO, including take reporting and monitoring results. Base the impact assessment conclusions on these data and discuss the project impacts to the desert tortoise in the context of the cumulative impacts this species is experiencing and expected to experience from the many renewable energy projects proposed in the Mojave Desert. We recommend consulting with the U.S. Fish and Wildlife Service, as appropriate.

Wildlife Guzzlers

It is not clear whether or not the Marine Corps will continue to maintain or allow the maintenance of the wildlife guzzlers if an alternative that transfers management or ownership of the land to DoD is pursued.

Recommendation: Clarify the commitment and intentions of the Marine Corps regarding the wildlife guzzlers.

⁴ Stein, et al. 2008. “Federal Lands and Endangered Species: The role of military and other federal lands in sustaining biodiversity”. *BioScience* Vol 58 No. 4