



United States Department of the Interior

FISH AND WILDLIFE SERVICE

FISH AND WILDLIFE ENHANCEMENT
SOUTHERN CALIFORNIA FIELD STATION
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MCAS EL TORO
SSIC NO. 5090.3.A

April 5, 1991

J.R. Faunce, CAPT, CEC, USN
Director, Facilities Management Department
Marine Corps Air Station El Toro
El Toro, California 92709-5010

Dear Mr. Faunce:

The following comments are the U.S. Fish and Wildlife Service's (Service) concerns regarding the Marine Corps Air Station (MCAS) El Toro Draft Final Remedial Investigation Feasibility Study (RI/FS) Workplan and Sampling and Analysis Plan (SAP).

- o Petroleum hydrocarbons originating from MCAS El Toro and entering San Diego Creek via Borrego Canyon, Aqua Chinon, and Bee Canyon Wash, as well as Marshburn Channel need to be assessed for cumulative impacts to biota, in addition to evaluating specific sites' effects on fish and wildlife species. Environmental impacts of hydrocarbons to fish and wildlife would most likely occur offsite (offbase) in the aquatic habitats of San Diego Creek and possibly Newport Bay. The numerous sources of hydrocarbons found at El Toro, including OU-2 (all 5 sites), OU-3 (11 of 16 sites), Tank 398 site, and current base activities, may cumulatively pose a threat to biota, especially during storm events with increased runoff from MCAS El Toro entering San Diego Creek. Petroleum hydrocarbons (especially aromatics) are known to bioaccumulate in fish and wildlife species inhabiting coastal areas of southern California. The Service will make recommendations on appropriate biotic sampling based on the Phase I data. Total petroleum hydrocarbon (TPH) and portions of the semi-volatile data should be used to determine if further soil, sediment, surface water sampling is needed and if biotic sampling is necessary to determine the impacts of MCAS hydrocarbon sources to aquatic life of San Diego Creek and Newport Bay. The major concerns of Service include the protection of migratory birds and endangered species utilizing Newport Bay (light-footed clapper rail and California least tern) and maintaining quality habitat for these species.

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- o Sediment samples should be collected in areas of deposition. These areas typically have high total organic carbon (TOC) and are composed mostly of the silt and clay fractions. For reliable interpretation of the data, TOC and grain size analysis should be part of all routine sediment/soil analysis conducted in the RI/FS.
- o Little is known about the effects of TCE on fish and wildlife. Based on the data presented in the RI/FS Draft Final Work Plan, concentrations were below EPA Ambient Water Quality Criteria for freshwater and the more sensitive saltwater species. Due to the rapid photooxidation and volatility of TCE and the lack of evidence of biological impacts, OU-1 may not pose a threat to fish and wildlife. If Phase I samples show levels of TCE elevated above current known concentrations, impacts to biota would need to be reevaluated. Known effects of TCE to aquatic life usually are associated with central nervous system depressant activity. However, long-term low dose effects of TCE to aquatic life have not been adequately addressed.
- o Sites 1, 2, and 17 are located in the vicinity of habitat utilized by three candidate species (candidate species for listing on the Federal Endangered Species List) of concern. These species are the orange-throated whiptail, San Diego horned lizard, and the California gnatcatcher. The whiptail and horned lizard may be feeding within Sites 1, 2, and 17. This needs to be considered in assessing Phase I soil data. If these species were listed prior to cleanup of these sites and contamination of food sources was determined to exist, there would be possible violation of Section 9 of the Endangered Species Act.
- o If the California gnatcatcher should be listed, future activities involving sites 1, 2, and 17 related to the Installation Restoration Program (e.g., intensive sampling and/or cleanup activities) may require formal consultation with the Service. Any activity that may result in the destruction of gnatcatcher habitat (coastal sage scrub) or disturbance of that species may require a Section 7 (Endangered Species Act) formal consultation with the Service. To prevent any conflicts or delays in remedial actions, please keep the Service, as well as MCAS El Toro Natural Resource staff, informed of activities on these matters.
- o The aspects of the Endangered Species Act discussed above should be incorporated into the ARARs section of the RI/FS Work Plan.

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The Service appreciates the opportunity to review Installation Restoration Program documents and participate on the Technical Review Committee for MCAS El Toro. If further information is needed, please contact Dan Audet or Steve Goodbred of my staff at (714) 643-4270. Thank you.

Sincerely,

Brooks Harper

Brooks Harper
Office Supervisor