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Fish and Wildlife Service  
Ecological Services  
Carlsbad Fish and Wildlife Office  
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OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

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To	Joseph Joyce	From	Judy Gibson
Dept/Address	Ecological Services Carlsbad Fish and Wildlife Office	Phone #	
Fax #		Fax #	

NSN 7540-01-317-7368

5010-101

GENERAL SERVICES ADMINISTRATION

Re: Proposed Plan for Cleanup at Three Shallow Soil Sites at Marine Corps Air Station El Toro,  
Final - May 1999

Dear Mr. Joyce:

Thank you for providing us with the Department of the Navy's (DON) Proposed Plan for Cleanup at Three Shallow Soil Sites at Marine Corps Air Station (MCAS) El Toro, Orange County, California. The proposed plan outlines the preferred remedy for Sites 8, 11, and 12. These sites are located on MCAS property but are not within the acreage proposed for transfer to the U.S. Fish and Wildlife Service (Service).

Site 8 is a former Defense Reutilization and Marketing Office (DRMO) Storage Area. Portions of the DRMO storage area have since been paved. A portion of the remaining unpaved area was used to store electrical transformers and is the site of the release of transformer oil containing PCBs. Contaminants at Site 8 include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), PCBs, pesticides, petroleum hydrocarbons, and naturally occurring metals. Site 11 was a transformer storage area. Pesticides and PCBs are present at Site 11. Site 12 is the location of the sludge drying beds. Chemicals present at Site 12 include VOCs, SVOCs, PAHs, PCBs, pesticides, petroleum hydrocarbons, herbicides, cyanide, and metals. Results of the Risk assessment show chemicals present that contribute to human health risks at all three sites. Has an ecological risk assessment been conducted for contaminants present at Sites 8, 11, and 12?

The preferred remedy presented in the "Proposed Plan for Cleanup at Three Shallow Soil Sites at Marine Corps Air Station El Toro, Final - May 1999" states that contaminated soil from Sites 8, 11, and 12 would be excavated and used as foundation layer beneath the landfill caps for landfills 2 and 17. Landfills 2 and 17 are located within the acreage currently proposed for transfer to Service. The "Proposed Plan for Closure of Inactive Landfills 2 and 17 at Marine Corps Air Station El Toro, Final-May 1998" issued for public comment did not include the proposal to place contaminated soil from Sites 8, 11, and 12 into landfills 2 and 17. The Service was not made aware of this proposal until approximately one year later during our review of the Record of Decision (ROD) for Operable Unit 2B-Landfill Sites 2 and 17.

In our letter to you dated May 26, 1999 following our review of the ROD for Sites 2 and 17, we identified our concerns regarding placement of contaminated soil from Sites 8, 11, and 12 into landfills 2 and 17. We objected to the placement of this additional contamination at Sites 2 and 17 because

landfills 2 and 17 provide habitat for the Federally threatened California gnatcatcher with at least one breeding territory present at Site 2. Contaminants in soils from Sites 8, 11, and 12, include PCBs, VOCs, SVOCs, PAHs, pesticides, petroleum hydrocarbons, herbicides, cyanides and metals. The addition of these contaminants to landfills 2 and 17 will invalidate the ecological risk assessment previously conducted at those sites. These additional contaminants were not evaluated during the ecological risk assessment; therefore, the ecological risk assessment must be redone if contaminated soils from 8, 11, and 12 are to be added to the landfills.

In addition, Landfill 2 is located in Borrego Canyon Wash and is subject to flooding and erosion. Interim emergency remedial actions were taken by DON in 1996 to reduce erosion of landfill material. These activities included grading stream banks with installation of rip-rap along severely eroded sections and placement of debris, collected from the stream channel, at each landfill. Should the remedy fail over time due to erosion, there is a great potential for contaminant exposure to the California gnatcatcher and other migratory birds. If erosion occurs and contaminated soils from Sites 8, 11, and 12 are used for the foundation layer of the landfill cap, exposure to concentrations of DDT (as high as 3.6 mg/kg), PCBs (up to 3.58 mg/kg), herbicides such as MCP (up to 153 mg/kg) and lead (up to 531 mg/kg) is likely. This is in addition to the contaminants already buried at these sites.

Gnatcatchers have already been shown to be at risk from MCP during the ecological risk assessment conducted for Sites 2 and 17. The addition of increased levels of pesticides and PCBs as well as other contaminants at Sites 2 and 17 should be re-evaluated. Toxicity and accumulation of DDT and its metabolites (DDD and DDE) are of primary concern in birds. Adverse effects associated with DDT in birds include reproductive impairment, reduced fledgling success and eggshell thinning. Ecotoxicological mechanisms of DDT and the classic effects of egg shell thinning and population decline of avian species has been well documented (Blus 1996). Critical levels of DDE resulting in acute toxicity in brains, livers, and eggs of birds have been reported by Noble and Elliot (1996, cited by USDOJ, 1998). Critical levels of DDE as low as 1.2 mg/kg in eggs has been reported in some species (Noble and Elliot 1990, cited by USDOJ 1998). USDOJ 1998 also contains a synopsis of toxicity and accumulation of DDT and its metabolites in other vertebrates, as well as, aquatic and terrestrial invertebrates (USDOJ 1998).

The adverse effects of PCBs on wildlife has also been well documented. Adverse effects of PCBs on wildlife include mortality, deformities, reproductive failures, reduced growth and development, anemia, liver disorders and edema (Eisler 1986). Some lethal and sublethal effects in animals reported by Eisler (1996) include, hepatotoxicity, immunotoxicity, neurotoxicity, teratogenicity, and mutagenicity. Prenatal exposures to PCBs are documented to cause embryo mortality, developmental abnormalities, and endocrine disruption (Colborn 1993, Peterson et al. 1993, Safe 1994).

Section 7 of the Endangered Species Act (Act) of 1973, as amended requires a Federal agency to consult with the Fish and Wildlife Service (Service) in the event that a proposed action may affect a listed species. DON should initiate consultation with this office regarding the proposed remedial action at Sites 8, 11, and 12 in the event these contaminated soils are disposed of in landfills 2 and 17.

Because other alternatives for the remedy are available to DON such as on-site treatment by: 1) soil washing and thermal destruction; 2) excavation with low-temperature thermal desorption; and 3) off site disposal at the appropriate state approved landfill, we object to the placement of the contaminated soil from Sites 8, 11, and 12 in landfills 2 and 17. We strongly support DON's option to treat the waste, if required, prior to disposal and dispose of the contaminated waste from sites 8, 11, and 12 in an approved facility off-site. We can not support placement of additional contaminated waste in landfills 2 and 17

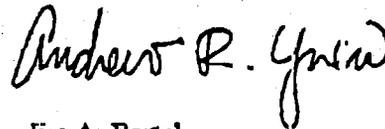
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since the surrounding acreage will potentially be transferred to the Service and incorporated into our refuge system.

We appreciate the opportunity to provide comments to the "Proposed Plan for Cleanup at Three Shallow Soil Sites at Marine Corps Air Station El Toro, Final - May 1999". We look forward to continuing our work with Marine Corps Air Station El Toro during the pre-acquisition process. If you have any questions regarding these comments, please contact Judy Gibson of my staff at 760-431-9440.

Sincerely,



Jim A. Bartel

Acting

Assistant Field Supervisor

cc:

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References:

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