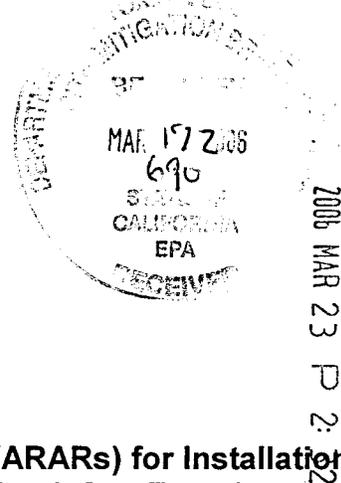


# Memorandum

To: Mr. David Rist  
Department of Toxic Substances Control  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710

Date: March 17, 2006

From: Charlie Huang, Ph.D.  
Staff Toxicologist  
Scientific Division  
Office of Spill Prevention and Response  
Department of Fish and Game  
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BRAC OFFICE

Subject: **Applicable or Relevant and Appropriate Requirements (ARARs) for Installation Restoration (IR) Site 30 at the Naval Station Treasure Island, San Francisco, California**

This memo is in response to a recent letter from Mr. James Sullivan of the Navy, requesting potential State ARARs for the feasibility study for Installation Restoration (IR) Site 30 at the Naval Station Treasure Island (NAVSTA TI). The Department of Fish and Game, Office of Spill Prevention and Response (DFG-OSPR) appreciates this opportunity to provide State laws and regulations to guide the planned cleanup of NAVSTA TI.

It is our understanding that the Navy is making the request for ARARs for the purpose of ensuring a coordinated cleanup effort. The request for DFG-OSPR to define appropriate State cleanup requirements is made pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as a portion of the removal action process. This memo will serve to advise you of the DFG's continuing interest in coordinating any natural resource issues, as the designated natural resource trustee for the State of California. This may be necessary should release(s) of any hazardous materials at the subject site affect State natural resources.

NAVSTA TI, located in San Francisco Bay between San Francisco and Oakland, California, consists of two contiguous islands: 403-acre Treasure Island (TI) and 147-acre Yerba Buena Island (YBI). NAVSTA TI is part of the greater ecosystem of the San Francisco Bay, which is the largest coastal embayment on the Pacific Coast and home to a diverse ecological community. Four wildlife species, classified as endangered by state and/or federal governments, inhabit the vicinity of NAVSTA TI: the California Least Tern, the Peregrine Falcon, the California Brown Pelican, and the Double-crested Cormorant. U.S. Fish and Wildlife Service has removed the Peregrine Falcon from the federal endangered species list, however it retains its endangered status under State law.

IR Site 30 is a relatively small site of approximately 1.5 acres. It includes Building 502, which is currently used as the Treasure Island Daycare Center.

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The Remedial Investigation report stated that the chemicals exceeding screening criteria in soil samples at IR Site 30 are benzo(a)pyrene, DDT, lead, arsenic, vanadium, and dioxins. The site does not contain significant habitat for wildlife species because IR Site 30 is predominantly covered with urbanized areas. However, there is potential risk to aquatic receptors because contaminated groundwater migrated to the offshore surface water of the Bay.

Listed on the enclosed table is a site-specific list of Fish and Game Code Sections which may apply as State ARARs or TBCs (to be considered) with the date of enactment or promulgation. The specific citation and explanation for each listed ARAR and TBC are also enclosed, in addition to applicable statutes and regulations.

The DFG-OSPR appreciates the opportunity to provide our ARARs. If you have any questions or need further information, please contact me at (916) 324-9805 or by e-mail at [chuang@ospr.dfg.ca.gov](mailto:chuang@ospr.dfg.ca.gov).

Reviewer: Julie Yamamoto, Ph.D., Senior Toxicologist  
Wendy Johnson, Staff Counsel

Enclosure

cc: Department of Fish and Game  
Office of Spill Prevention and Response  
Julie Yamamoto, CDFG/OSPR-Scientific  
Wendy Johnson, CDFG/OSPR-Legal

**CALIFORNIA DEPARTMENT OF FISH AND GAME  
LOCATION AND ACTION SPECIFIC ARARs AND TBCs  
IR Site 30, Naval Station Treasure Island**

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
Aquatic habitat/species	Action must be taken if toxic materials are placed where they can enter waters of the State. There can be no release that would have a deleterious effect on species or habitat.	Fish and Game Code section 5650 (a), (b) & (f)	This code section prohibits depositing or placing where it can pass into waters of the state any petroleum products (Section 5650(a)(1)), factory refuse (section 5650(a)(4)), sawdust, shavings, slabs or edgings (section 5650(a)(3)), and any substance deleterious to fish, plant life or bird life (section 5650(a)(6)). These are substantive, promulgated environmental protection requirements. These requirements impose strict criminal liability on violators. ( <i>People v. Chevron Chemical Company (1983) 143 Cal. App. 3d 50</i> ). This imposition of strict criminal liability imposes a standard that is more stringent than federal law. The extent to which each subdivision of section 5650 is relevant and appropriate depends on the site characterization and the potential for contaminants to be deposited near or within waters of the state.
Wildlife Species	Action must be taken to prohibit the taking of birds and mammals, including the taking by poison	Fish and Game Code section 3005 (Stats. 1957, c. 456, p. 1353 section 3005)	This code section prohibits the taking of birds and mammals, including taking by poison. "Take" is defined by Fish and Game Code section 86 to include killing. "Poison" is not defined in the code. Although there is no state authority on this point, federal law recognizes that poison, such as Strychnine, may affect incidental taking. ( <i>Defenders of Wildlife v. Administrator, Environmental Protection Agency (1989) 882. F. 2d. 1295</i> ). This code section imposes a substantive, promulgated environmental protection requirement.
Endangered Species	Action must be taken to conserve endangered species; there can be no releases and/or actions	Fish and Game Code section 2080 (Added by	This section prohibits the take, possession, purchase or sell within the state, any species (including rare native plant species), or any product thereof, that the commission determines to be an endangered or threatened species, or the attempt of any of these acts. This section is applicable and relevant to the extent

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IR Site 30, Naval Station Treasure Island**

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
	that would have a deleterious effect on species or habitat.	Stats. 1984, c. 1240, section 2).	<p>that there are endangered or threatened species in the area which have the potential of being affected if actions are not taken to conserve the species. This section prohibits releases and/or actions that would have a deleterious effect on species or their habitat. This section and applicable Title 14 regulations should be considered as ARARs.</p> <p><i>California Code of Regulations Title 14 sections 670.2</i> provides a listing the plants of California declared to be Endangered, Threatened or Rare.</p> <p><i>California Code of Regulations Title 14 section 670.5</i> provides a listing of Animals of California declared to be endangered or threatened.</p> <p><i>California Code of Regulations Title 14 section 783 et. seq.,</i> provides the implementation regulations for the California Endangered Species Act.</p>
Fully protected bird species/habitat	Action must be taken to prevent the taking of fully protected birds	Fish and Game Code section 3511 (Added by Stats.1970, c. 1036, p. 1848 section 4)	<p>This section provides that it is unlawful to take or possess any of the following fully protected birds:</p> <ul style="list-style-type: none"> <li>(a). American peregrine falcon</li> <li>(b). Brown Pelican</li> <li>(c). California black rail</li> <li>(d). California clapper rail</li> <li>(e). California condor</li> <li>(f). California least tern</li> <li>(g). Golden eagle</li> <li>(h). Greater sandhill crane</li> </ul>

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LOCATION AND ACTION SPECIFIC ARARs AND TBCs  
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LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
			<ul style="list-style-type: none"> <li>(i). Light-footed clapper rail</li> <li>(j). Southern bald eagle</li> <li>(k). Trumpeter swan</li> <li>(l). White-tailed kite</li> <li>(m). Yuma clapper rail</li> </ul> <p>This should be considered Applicable and Relevant to the extent that such fully protected birds or their habitat are detected on or near the site. The Brown Pelican and California least tern are known to occur on or near this site.</p>
Fully Protected Mammals	Actions must be taken to assure that no fully protected mammals are taken or possessed at any time.	Fish and Game Code section 4700 (Added by Stats. 1970, c. 1036, p. 1848 section 6)	<p>This section prohibits the take or possession of any of the fully protected mammals or their parts. The following are fully protected mammals:</p> <ul style="list-style-type: none"> <li>(a) Morro Bay kangaroo rat</li> <li>(b) Bighorn sheep except Nelson bighorn sheep</li> <li>(c) Northern elephant seal</li> <li>(d) Guadalupe fur seal</li> <li>(e) Ring-tailed cat</li> <li>(f) Pacific right whale</li> <li>(g) Salt-marsh harvest mouse</li> <li>(h) Southern sea otter</li> <li>(i) Wolverine</li> </ul> <p>This section is applicable, relevant, and appropriate to the extent that such mammals and/or their habitat are located on or near the site.</p>

**CALIFORNIA DEPARTMENT OF FISH AND GAME  
LOCATION AND ACTION SPECIFIC ARARs AND TBCs  
IR Site 30, Naval Station Treasure Island**

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
Fully Protected Reptiles and Amphibians	Actions must be taken to prevent the take or possession of any fully protected reptile or amphibian.	Fish and Game Code section 5050 (Added by Stats. 1970, c. 1036, p. 1849, section 7)	<p>This section prohibits the take or possession of fully protected reptiles and amphibians or parts thereof. The following are fully protected reptiles and amphibians:</p> <ul style="list-style-type: none"> <li>(1) Blunt-nosed leopard lizard</li> <li>(2) San Francisco garter snake</li> <li>(3) Santa Cruz long-toed salamander</li> <li>(4) Limestone salamander</li> <li>(5) Black toad</li> </ul> <p>This section is applicable, relevant and appropriate to the extent that these amphibians or reptiles and/or their habitat are located on or near the site.</p>
Birds	Action must be taken to avoid the take or destruction of the nest or eggs of any bird	Fish and Game Code section 3503	This section prohibits the take, possession, or needless destruction of the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.
Birds of Prey	Action must be taken to prevent the take, possession, or destruction of any birds-of prey or their eggs	Fish and Game Code section 3503.5 (Added by Stats. 1985, c. 1334, section	This section prohibits the take, possession, or destruction of any birds in the orders of Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. This section will be applicable and relevant to the extent that such species or their eggs are located on or near the site.

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IR Site 30, Naval Station Treasure Island**

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
		6)	
Nongame birds	Actions must be taken to prevent the take of nongame birds.	Fish and Game Code section 3800 (Added by Stats. 1971, c. 1470, p. 2906, section 13)	This section prohibits the take of nongame birds, except in accordance with regulations of the commission, or when related to mining operations with a mitigation plan approved by the department. This section further provides requirements concerning mitigation plans related to mining. This section is applicable and relevant to the extent that nongame birds or their eggs are located on or near the site and such species have not been included in the fish and wildlife conservation plan filed pursuant to the Federal Fish and Wildlife Conservation Act. Species included in the plan will be protected at the federal standard making this section an ARAR to the extent that it is more stringent than the federal standard of protection.
Fur-bearing mammals	Provides manners under which fur-bearing mammals may be taken	Fish and Game Code section 4000, et. Seq. (Stats. 1957, c. 456, p. 1380, section 4000)	This section provides that a fur-bearing mammal may be taken only with a trap, a firearm, bow and arrow, poison under a proper permit, or with the use of dogs.
Nongame mammals	Action must be taken to avoid the take or possession of nongame mammals	Fish and Game Code section 4150 (Added by Stats. 1971, c.	Nongame mammals are those occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals. These mammals, or their parts, may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission.

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LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
		1470, p. 2907, section 21)	
White Shark	Action must be taken to avoid the take of any white shark	Fish and Game Code section 5517 (Added by Stats. 1993, c. 1174 (A.B. 522), section 2)	It is unlawful to take any white shark ( <i>Carcharodon carcharias</i> ), except under permit issued pursuant to section 1002 for scientific or educational purposes.
Tidal Invertebrates	Action must be taken to avoid the take or possession of mollusks, crustaceans, or other invertebrates	Fish and Game Code section 8500 (Added by Stats. 1972, c. 1248, p. 2436. Section 2, eff. Dec. 13, 1972)	It is unlawful to possess or take, unless otherwise expressly permitted in this chapter, mollusks, crustaceans, or other invertebrates, unless a valid tidal invertebrate permit has been issued. The taking, possessing, or landing of such invertebrates pursuant to this section shall be subject to regulations adopted by the commission.
White Shark	Action must be taken to prevent the take of any white shark.	Title 14 C.C.R. section 28.06	Regulation provides that white shark may not be taken, except under permit issued by the Department pursuant to section 1002 of the Fish and Game Code for scientific or educational purposes.

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LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
		(effective 03/07/94)	
Protected Amphibians	Action must be taken to avoid the take or possession of protected amphibians.	Title 14 C.C.R. sections 40 (Section 40 designated effective 03/01/74)	This regulation makes it unlawful to capture, collect, intentionally kill or injure, possess, purchase, propagate, sell, transport, import, or export any native reptile or amphibian, or parts thereof unless under special permit from the department issued pursuant to Title 14 C.C.R. sections 650, 670.7, or 783 of these regulations, or as otherwise provided in the Fish and Game Code or these regulations.