UNITED STATES MARINE CORPS
HEADQUARTERS MARINE CORPS AIR STATION EL TORO
PO BOX 95000
SANTA ANA CA 92709-5000

IN REPLY REFER TO:
6284
1AU
25 APR 1997

CERTIFIED MAIL, RETURN RECEIPT REQUESTED P 673 720 748

California Environmental Protection Agency
Department of Toxic Substance Control, Region 4
Attn: Mr. John Scandura, Chief
Office of Military Facilities
Southern California Operations
245 West Broadway, Suite 350
Long Beach, CA 90802-4444

Dear Mr. Scandura:

Pursuant to 40 CFR Section 300.515(h)(2), and Section 7.6(b) of the Federal Facilities Agreement (FFA) and consistent with §V.A.2.c of the August 1, 1990 Memorandum of Understanding between the Department of Health Services, the State Water Resources Control Board, and the Regional Water Quality Control Boards for the Cleanup of Hazardous Waste Sites, we are hereby requesting that the Department of Toxic Substances Control, as the lead agency for the State of California, identify potential State chemical-, location-, and action-specific Applicable or Relevant and Appropriate Requirements (ARARs) for Operable Unit (OU) 3A (Sites 8,11 and 12).

We have previously transmitted to you site characterization data in the Phase I Remedial Investigation (RI) Technical Memorandum dated May 7, 1993 (for OU-1, OU-2 and OU-3 sites), the Draft Phase II Remedial Investigation Report for OU-3A sites dated November 1996, and the Draft Final Phase II Remedial Investigation Report for OU-3A sites dated March 1997.

The remedial alternatives for OU-3A have been screened and developed for the detailed analysis of alternatives phase of the Feasibility Study (FS) for each site. A project description and list of the proposed alternatives for OU-3A is provided as enclosure (1) and worksheets are provided as enclosure (2).

In addition, the Department of the Navy is requesting that the State of California identify any other criteria, advisories, guidance, and proposed standards that the State requests to be considered (TBCs) for OU-3A.

Timely identification of potential State ARARs is required under Section 121(d)(2)(A) of CERCLA and under the National Contingency Plan (NCP), 40 CFR §§300.400(g) and 300.515(d) & (h). Experience to date around the country has shown that a failure to identify ARARs with sufficient precision, early in the RI/FS process, can cause severe disruptions in timely implementation of remedial action. To ensure timely and complete ARARs identification for OU-3A, please include the following information:

1. A specific citation to the statutory or regulatory provision(s) for the potential State ARAR and the date of enactment or promulgation.

2. A brief description of why the potential State ARAR is applicable or relevant and appropriate to the particular OU (or IR Site).

3. A description of how the potential State ARAR would apply to potential remedial action, including: specific numeric discharge, effluent, or emission limitations; hazardous substance/constituent action or cleanup levels; etc., if the State intends to take the position that the potential State ARAR includes such limitations, levels, etc.

4. If the State believes its proposed ARAR is more stringent than the corresponding Federal ARAR, please provide the rationale and technical justification for this position.

5. If the State determines that there is not enough information to fully respond to our request, please identify any additional information that would be required to support identification of State ARARs and their application. Consistent with 40 CFR §300.515(h)(2) and the FFA, we are requesting that you send a response via first class mail addressed to the undersigned and postmarked within 30 calendar days of receipt of this request.

We would like to discuss your response at a meeting as provided in FFA Section *7.6(b)*. Please direct any technical questions that you may have concerning this request to the undersigned at (714) 726-3470 and any legal questions to Mr. Rex Callaway, Associate Counsel (Environmental), at (619-532-1662).

Sincerely,

JOSEPH JOYCE
Base Realignment and Closure
Environmental Coordinator
By direction of
the Commanding General

Encl:
(1) F/S Detailed Alternatives for OU-3A Sites
(2) Feasibility Study Data Worksheets

Copy:
Mr. Tayseer Mahmoud, DTSC
Mr. Larry Vitale, RWQCB
Mr. Glenn Kistner, USEPA
Mr. Andy Piszkin, SW DIV
Mr. Rex Calloway, SW DIV

bcc: Mr. Tayseer Mahmoud
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FEASIBILITY STUDY DETAILED ALTERNATIVES FOR OU-3A SITES

Site 8 (Units 1 and 4, Units 2 and 3), Site 11 (Units 1 and 2), Site 12 (Unit 3)

Alternative 1 - No Action.

Alternative 2 - Capping With Restrictive Covenant.

Alternative 3 - Excavation and On-Station Disposal at OU-2B Site 17 (Landfill).

Alternative 4 - Excavation, On-Site Soil Washing (segregate contaminated soil), On-Site Disposal of Uncontaminated Soil, On-Site Incineration of Contaminated Soil and Disposal of Incinerator Residuals at Off-Station Class I Landfill.

Alternative 5 - Excavation, On-Site Soil Washing, and Disposal in Off-Station Class I Landfill.

Site 8 Unit 5

Alternative 1 - No Action.

Alternative 2 - Capping With Restrictive Covenant.

Alternative 3 - Excavation and On-Station Disposal at OU-2B Site 17 (Landfill).

Alternative 4 - Excavation, On-Site Thermal Desorption, and On-Site Disposal.

Alternative 5 - Excavation, On-Site Soil Washing (segregate contaminated soil), On-Site Disposal of Uncontaminated Soil, and Off-Station Disposal of Contaminated Soil at Class I Landfill.

CTO-079 OU-3A Feasibility Study Data Worksheet

Site No.	8, Defense Reutilization Marketing Office (DRMO) Storage Yard
Unit No(s).	1 (East Storage Yard) and 4 (PCB Spill Area)

Description of Area: Units 1 and 4 comprise the eastern third of the fenced DRMO Storage Yard. Unit 4 is located entirely within boundary of Unit 1. Access to the fenced storage yard is controlled and it remains in operation.

Site History: In use since the early 1940s for the storage of scrap and salvage materials including mechanical and electrical components and various liquids. Typical DRMO materials include surplus and used equipment. Unit 4, entirely contained within Unit 1, is the location where about 5-gallons of oil containing PCBs leaked from an electrical console in 1984. Soil at the leak location was subsequently excavated to a depth of 1 foot (1,500 cu. ft.)

Physical Characteristics: Flat, unpaved, rectangular area consisting of soil and gravel. Upper several feet of soil is fill material imported to level ground surface.

Dimensions of Area to be Remediated

Width (ft.)	227	(NW-SE)
Length (ft.)	260	(SW-NE)
Depth (ft.)	6	(PCBs and PAHs reported in samples to 4 feet bgs)

Estimated Soil Volume: 354,120 cu.ft. 13,116 cu.yd. 17,706 tons

Principal Contaminants (Risk Drivers)	Maximum Reported Concentration (mg/kg)	Exposure Point Concentration (mg/kg)
Aroclor 1248	0.297	0.3
Aroclor 1260	2.2	0.1
Benzo(a)pyrene	0.15	0.15

Other Contaminants	Maximum Reported Concentration (mg/kg)
Aroclor 1254	3.02
Benz(a)anthracene	0.004
Benzo(b)fluoranthene	0.008
Indeno(1,2,3-cd)pyrene	0.15
Other PAHs	0.14
SVOCs (excluding PAHs)	1.5
4,4-DDT	0.3
Other Pesticides	0.21
TPH (diesel)	1,060
TRPH	7,730
VOCs (4)	0.013

Comments: Contaminants primarily in upper 2 feet of soil; with PAHs, PCBs, and

petroleum hydrocarbons to 4 feet bgs at several locations. PCBs at 1.3 mg/kg in 4 feet bgs sample from one Unit 4 location. Metals present in soil but not considered human-health risk.

CTO-079 OU-3A Feasibility Study Data Worksheet

Site No.	8, Defense Reutilization Marketing Office (DRMO) Storage Yard
Unit No(s).	2 (West Storage Yard) and 3 (Refuse Pile)

Description of Area: Units 2 and 3 comprise the western two-thirds of the fenced DRMO Storage Yard. Unit 3 is located entirely within boundary of Unit 2. Access to the fenced storage yard is controlled and it remains in operation.

Site History: In use since the early 1940s for the storage of scrap and salvage materials including mechanical and electrical components and various liquids. Typical DRMO materials include surplus and used equipment. Unit 3, entirely contained within Unit 3, is the former location of a refuse pile within the yard, that was removed in 1990. Soil beneath pile contained PCBs (up to 20 mg/kg). Top 2 feet of soil, containing highest reported PCB concentrations, was excavated in late 1993.

Physical Characteristics: Flat, asphalt paved, rectangular area. Upper several feet of soil beneath asphalt is fill material imported to level ground surface.

Dimensions of Area to be Remediated

Width (ft.)	35 (SW-NE)
Length (ft.)	70 (NW-SE)
Depth (ft.)	6 (PCBs reported in sample at 4 ft. bgs)

Estimated Soil Volume: 14,700 cu.ft. 544 cu.yd. 735 tons

Principal Contaminants (Risk Drivers)	Maximum Reported Concentration (mg/kg)	Exposure Point Concentration (mg/kg)
Aroclor 1248	0.244	0.24
Aroclor 1254	0.397	0.4
Aroclor 1260	0.214	0.21

Other Contaminants	Maximum Reported Concentration (mg/kg)
Benzyl butyl phthalate	0.19
Pesticides (3)	0.013
TPH (diesel)	28.7

Comments: All PCBs were reported in single 4 ft. bgs sample in Unit 3. Assume any remedial action will encompass only west half of Unit 3 where PCBs were identified. Metals present in soil but not considered human-health risk.

CTO-079 OU-3A Feasibility Study Data Worksheet

Site No. 8, Defense Reutilization Marketing Office (DRMO) Storage Yard
Unit No(s). 5 (Old Salvage Yard)

Description of Area: Unit 5, the Old Salvage Yard is a former part of the DRMO storage area that is now used as a parking area for military equipment and personal vehicles. Eastern half is part of a fenced military equipment maintenance and storage area. Access to fenced half is controlled and the entire unit remains in use as a parking area.

Site History: Used from the 1940s through the 1970s for storage of scrap and salvage materials including mechanical and electrical components and various liquids. Typical DRMO materials included surplus and used equipment. Unit 5 has been used as a parking area since the mid-1980's.

Physical Characteristics: Western half of unit is flat, unpaved, rectangular area consisting of bare soil. Eastern half is covered by asphalt pavement and isolated from the western half by a chain-link fence. Upper 5 feet of soil throughout Unit 5 is imported fill material.

Dimensions of Area to be Remediated

Width (ft.)	210 (NW-SE)
Length (ft.)	375 (SW-NE)
Depth (ft.)	6 (PAHs and PCBs reported in samples to 4 feet bgs)

Estimated Soil Volume: 472,500 cu.ft. 17,500 cu.yd. 23,625 tons

Principal Contaminants (Risk Drivers)	Maximum Reported Concentration (mg/kg)	Exposure Point Concentration (mg/kg)
Aroclor 1260	0.046	0.046
Benzo(b)fluoranthene	2.1	2.1
Indeno(1,2,3-cd)pyrene	31	31

Other Contaminants	Maximum Reported Concentration (mg/kg)
Motor oil	7,500
Other PAHs (2)	6.1
4,4-DDD	0.25
Other Pesticides (5)	0.087
VOCs (5)	0.008

Comments: PCBs reported in only one 2- to 4-feet bgs sample. PAHs reported in only three samples, 0 to 4 feet bgs. Metals present in soil but not considered human-health risk. Assume that any remedial action will only encompass unpaved western half of Unit 5 where vehicle parking on unpaved soil occurs. Contaminants believed to be associated primarily with oil leakage from parked motor vehicles.

CTO-079 OU-3A Feasibility Study Data Worksheet

Site No.	11, Transformer Storage Area
Unit No(s).	1 (Concrete Pad Edge)

Description of Area: A 3-foot-wide strip of ground adjacent to three sides of a concrete pad. Both ends of this 3-foot-wide strip abut a shallow asphalt-lined drainage ditch (Unit 2) that borders the fourth side of the concrete pad. Concrete pad and adjacent ground used for storage of miscellaneous equipment and scrap metal.

Site History: Site 11 was formerly used as a maintenance and storage yard for electrical transformers between 1968 and 1983. Transformers were stored on the concrete pad and throughout the remainder of the dirt yard behind Building 369. An estimated 60 gallons of transformer oil containing PCBs reportedly leaked or spilled at this site. Transformer oil spilled on the concrete pad is believed to have flowed to the pad edge where it discharged onto the bare ground surface of the storage yard.

Physical Characteristics: Area of Unit 1 is a relatively flat dirt and gravel strip with patches of asphalt. Ground in area of Unit 1 consists of up to 5 feet of imported fill material used to level the storage yard. Poorly developed drainage in Unit 1 is toward an asphalt-lined drainage ditch.

Dimensions of Area to be Remediated

Width (ft.)	4	(Strip along three sides of concrete pad)
Length (ft.)	100	(Strip along three sides of concrete pad)
Depth (ft.)	2	(All PCBs in surface soil)

Estimated Soil Volume: 800 cu.ft. 30 cu.yd. 40 tons

Principal Contaminants (Risk Drivers)	Maximum Reported Concentration (mg/kg)	Exposure Point Concentration (mg/kg)
Aroclor 1260	2.8	2.8

Other Contaminants	Maximum Reported Concentration (mg/kg)
Pesticides (8)	0.1

Comments: All reported PCBs confined to surface soil samples, none reported in soil samples collected at depths of 2 feet bgs or greater.

CTO-079 OU-3A Feasibility Study Data Worksheet

Site No.	11, Transformer Storage Area
Unit No(s).	2 (Drainage Ditch)

Description of Area: A shallow, asphalt-lined drainage ditch located along the back wall of Building 369, between the building wall and a concrete pad (Unit 1). The drainage ditch collects runoff from throughout the storage yard. Runoff in the ditch drains out the northwest and southeast ends onto adjacent asphalt-paved streets.

Site History: Site 11 was formerly used as a maintenance and storage yard for electrical transformers between 1968 and 1983. Transformers were stored on the concrete pad and throughout the remainder of the dirt yard behind Building 369. An estimated 60 gallons of transformer oil containing PCBs reportedly leaked or spilled at this site. Transformer oil spilled on the concrete pad is believed to have flowed to the pad edge where it discharged into the drainage ditch or onto the bare ground surface of the storage yard. Runoff from part of storage yard also flows to ditch.

Physical Characteristics: Asphalt-lined ditch is 1 to 2 feet deep and up to about 3 feet wide. Ditch is crowned in the middle and slopes toward the northwest and southeast ends. Ditch is cut into fill material used to level the ground surface of the storage yard. Up to 5 feet of imported fill present along back wall of Building 369. The two ends of the ditch are about 3 to 4 feet above the grade of the adjacent streets.

Dimensions of Area to be Remediated	NW end - fence line to 11_DD2	Remainder of ditch	
Width (ft.)	4	4	(SW-NE)
Length (ft.)	25	195	(NW-SE)
Depth (ft.)	6	2	

Estimated Soil Volume of Combined Areas: 2,160 cu.ft. 80 cu.yd. 108 tons

Principal Contaminants (Risk Drivers)	Maximum Reported Concentration (mg/kg)	Exposure Point Concentration (mg/kg)
Aroclor 1260	3.6	2.1

Other Contaminants	Maximum Reported Concentration (mg/kg)
Pesticides (11)	0.145

Comments: PCBs primarily in surface soil with exception of a single 4-foot bgs sample (highest reported concentration). Trace concentrations (<20 ug/kg) of PCBs reported between 4 and 10 feet bgs with immunoassay analyses (fixed-base laboratory results were ND, but immunoassay detection limit lower than fixed-base laboratory detection limit).

CTO-079 OU-3A Feasibility Study Data Worksheet

Site No. 12, Sludge Drying Beds
Unit No(s). 3 (Drainage Ditch)

Description of Area: A drainage ditch that snakes around the sludge drying bed locations of the Station's former wastewater treatment plant site. Ditch begins along South Marine Way and terminates at Bee Canyon Wash. Areas adjacent to the ditch are undeveloped, but have been used as a contractor's staging area and for storage of excavated soil and shredded organic material (wood/bark chips).

Site History: A wastewater treatment plant operated at Site 12 between 1943 and 1972. The areas adjacent to the drainage ditch consisted of bermed sludge drying beds that were abandoned in place and covered with about 5 feet of fill material after the plant closed in early 1970s. Ditch may have received runoff from areas of the former sludge drying beds.

Physical Characteristics: The upper end of the drainage ditch is about 3 to 4 feet wide and up to 3 feet deep. After passing through a concrete culvert beneath Plant Road, the lower end of the ditch becomes up to 15 feet wide and 10 feet deep. The ditch is unlined, but soil is relatively stable due to grass-cover along length of ditch. Downstream end of the ditch is open to Bee Canyon Wash, a surface drainage that flows through the Station and eventually discharges into Upper Newport Bay.

Dimensions of Area to be Remediated	Upper end of ditch, north of Plant Rd.	Lower end of ditch, south of Plant Rd.
Width (ft.)	5	15
Length (ft.)	560	865
Depth (ft.)	3	7

Estimated Soil Volume of Combined Areas: 99,225 cu.ft. 3,675 cu.yd. 4,961 tons

Principal Contaminants (Risk Drivers)	Maximum Reported Concentration (mg/kg)	Exposure Point Concentration (mg/kg)
Aroclor 1254	2.5	2.5
Aroclor 1260	0.64	0.64
Benzo(a)pyrene	0.21	0.21
Benzo(b)fluoranthene	0.93	0.93
Benzo(k)fluoranthene	0.55	0.55
Dibenz(a,h)anthracene	0.22	0.13
4,4-DDT	3.7	3.7
Dieldrin	0.1	0.1
MCPP	153	153

Other Contaminants	Maximum Reported Concentration (mg/kg)
Bis(2-ethylhexyl)phthalate	0.6
Cyanide	0.35
Other Herbicides (2)	0.3
Benz(a)anthracene	0.042
Indeno(1,2,3-cd)pyrene	0.18
Other PAHs (5)	1.7
Other Pesticides (8)	1,190
TRPH	42,529
TPH (diesel)	1,970
VOCs (6)	0.036

Comments: PAHs, PCBs, and pesticides reported in samples along entire length of drainage ditch. Metals present in soil but not human-health risk. Along north half of ditch, PCBs to 2 feet bgs and pesticides to 10 feet, but only trace concentrations (<5 ug/kg) below 2 feet bgs. PAHs in surface soil only. Along south half of ditch, PCBs to 2 feet bgs (except 5 feet at 12B303); pesticides to 5 feet bgs; and PAHs to 2 feet bgs (except to 5 feet at 12B303).