



Cal/EPA

RECEIVED  
CODE 18

20 SEP 96 15 41

N00247.000414  
NTC SAN DIEGO  
SSIC #5090.3



September 17, 1996

Department of  
Toxic Substances  
Control

245 West Broadway,  
Suite 425  
Long Beach, CA  
90802-4444

Mr. Keith S. Forman  
Interim BEC  
Department of the Navy  
Naval Training Center  
33502 Decatur Road, Suite 120  
San Diego, California 92133-1449

Pete Wilson  
Governor

James M. Strock  
Secretary for  
Environmental  
Protection

COMMENTS ON DRAFT BOAT CHANNEL SEDIMENT  
CHARACTERIZATION REPORT AT NAVAL TRAINING CENTER, SAN  
DIEGO, CALIFORNIA

Dear Mr. Forman:

The Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board (RWQCB), and the Department of Fish and Game (DFG), hereafter collectively known as the State, have reviewed the Draft Sediment Characterization Report for the Boat Channel at Naval Training Center, San Diego (NTC). The report is dated July 31, 1996. In general, we found the report to be well written and organized, and we agree with the conclusion of the report. However, a few comments were generated based on the State's review and they are provided below. As mentioned during our telephone conversation of September 6, 1996, the DTSC Toxicologist does not anticipate the completion of his review of the report until September 18, 1996. Therefore, I will forward his comments to you as soon as they become available.

1. Section 2.2, Page 2-4, 3rd paragraph

The last sentence of this paragraph refers to another report regarding the details of the benchmarks, sampling procedures and analytical results for sampling of the outfalls. However, the name of that report is not clear. Is the referenced report referring to the CDM Federal Program field investigation, Storm Water Discharge Management Plan or the Law/Crandall 1996 wet



Mr. Keith S. Forman  
September 17, 1996  
Page 2

season sampling analysis? Please clearly identify the referenced report.

2. Table 2-3, Page 2-9

An outfall 2B is identified in Table 2-3, however, this outfall is not listed in Table 2-2, or Figure 1- Site Map for the Annual Report for Storm Water Discharge. Please identify the location of this outfall.

3. Section 5.4, Bioaccumulation Data, Page 5-25

In the last sentence of the second paragraph, PCB concentration is discussed. However, this sentence states that the Sample Quantitation Limits (SQLs) for PCBs in Stratum 1 sample were higher than for other samples, but this section did not discuss the rationale as to why these SQLs were higher than other Strata and whether higher SQLs would skew the result for this stratum.

4. Section 5.5.2.2, Echinoderm Larval Development

According to this paragraph, only Station "S3S3" obtained normal development greater than 90 percent. However, according to Table 5-7, it is Station "S3S1" that obtained a normal development greater than 90 percent. Please correct the mistake and label the proper station.

5. Section 6.3.4, Conclusion

Table 6-10 and page 6-23 recommends further assessment of Strata 1 and 2. However, there was no conclusion or recommendation made for Stratum 3 despite the statement made on page 6-28 regarding Stratum 3 that the "depressed normal development measured in the sea urchin larval test indicates that there is some other factor, apparently not measured, that may be contributing to the toxicity." Please make a definitive

Mr. Keith S. Forman  
September 17, 1996  
Page 3

recommendation of further action in the report for  
Stratum 3.

In addition to the above, comments from DFG are  
also attached for your consideration. If you have any  
questions regarding this letter, please feel free to  
contact me at (310) 590-4897.

Sincerely,



Aaron Yue  
EAR Specialist/ Interim RPM  
Base Closure and Conversion  
Office of Military Facilities

Enclosure

cc: Ms. Content Arnold  
Naval Facilities Engineering Command  
Southwest Division  
1220 Pacific Highway  
San Diego, California 92132-5287

Mr. Corey Walsh  
Remedial Project Manager  
California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Blvd., Suite B  
San Diego, California 92124-1331

Mr. Martin Hausladen  
Hazardous Waste Management Division  
Mail Code (H-9-2)  
U.S. Environmental Protection Agency  
Region IX  
75 Hawthorne Street  
San Francisco, California 94105

Mr. Keith S. Forman  
September 17, 1996  
Page 4

Mr. Scott Flint  
Senior Biologist  
California Department of Fish and Game  
20 Lower Ragsdale Drive, Suite 100  
Monterey, California 93940

Mr. Jim Polisini  
Office of Scientific Affairs  
Department of Toxic Substances Control  
1011 N. Grandview Avenue  
Glendale, California 91201

Ms. Sharon Fair  
Unit Chief  
Environmental Assessment and Reuse Unit  
Department of Toxic Substances Control  
245 West Broadway, Suite 350  
Long Beach, California 90802

MEMORANDUM

To: Mr. Aaron Yue  
Department of Toxic Substances Control  
Office of Military Facilities  
245 West Broadway, Suite 425  
Long Beach, CA 92802-4444

Date: September 11, 1996

From: Department of Fish and Game

Subject: Comments on Draft Report for Sediment Characterization of the Boat Channel, Naval Training Center, San Diego California. (5920/60130/NTX505 00:20)

The Department of Fish and Game (Department) has reviewed the subject document with regard to our role as natural resource trustee for protection of the State's fish, wildlife, biota, and their habitats. The NTC Boat channel serves as a spawning/rearing habitat area for marine fish species which inhabit the San Diego Bay. The Department's primary concern is that sediment contaminants may impact critical life stages of these species as well as benthic marine fauna which serve as a food source. Data from this characterization study indicate that impacts could occur from direct exposure to contaminated sediments, acute and chronic water column toxicity, and/or from bioaccumulation through the food chain. The primary chemicals of concern (COCs) at the NTC Boat Channel site include trace metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, and silver); pesticides including DDT and its isotopes, chlordane, aldrin, and heptachlor; PCBs and some PAHs.

The Department concurs with the report's conclusion that further investigation is warranted for Stratum 1 and Stratum 2 sediments. The Department recommends that Stratum 3 be investigated further as the data from this characterization study show elevated sediment chemistry levels (in relation to Stratum 2) of some trace metals (zinc, mercury), some high-molecular weight PAHs and low-molecular weight PAHs which may be associated with the Former Fire Fighting Training Area (FFTA), and DDT. The data also show bio-accumulation of organotin compounds (Table 5-6, pg. 5-26) occurring in Stratum 3 even though significant levels of organotins were not detected in the sediments. The Department also recommends that future investigations include analysis of samples for hexavalent chromium and sulfide as the results of these analyses on samples from this characterization study were invalidated or confounded by laboratory problems.

Staff from the Department's Military Facilities Program should be involved in the scoping and work plan development for additional investigations at the NTC Boat Channel site to resolve these issues. I have been assigned as the Department's contact person for CERCLA related technical oversight at NTC, and can be reached at the following location:

Mr. Scott A. Flint  
Department of Fish and Game  
Environmental Services Division  
1416 9<sup>th</sup> Street, Rm. 1341  
Sacramento, CA 95814

Mr. Aaron Yue  
September 11, 1996  
Page 2

Thank you for the opportunity to review and comment on the subject document. If you have any questions regarding these comments or need additional information, please call me at (408) 649-7195.

Sincerely,



Scott A. Flint  
Senior Biologist  
Environmental Services Division

SF:sf

cc: Department of Fish and Game

Mr. Pete Phillips, Sacramento

Mr. John Turner, Sacramento

Ms. Jennifer Decker, Sacramento

SEP-13-1996 13:27

1 916 684 7977

P.03