

**MEMORANDUM**

**To:** Phil Dyke, DOD Co-Chair NTC RAB  
**From:** Jim Durbin, Community Co-Chair NTC RAB  
**Date:** September 12, 1994  
**Subject:** NTC RAB comments on Draft, Preliminary Assessment Report, Naval Training Center, Site 4, 5, & 6.

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Attached are the comments submitted by the NTC RAB on subject report. As indicated in the report, the RAB does not agree with the recommendation on Site 4 and recommends further investigation (i.e. Site Investigation) be conducted with regard to the storm drains, sumps, and soaking tanks. Additionally, it is recommended that during the Site Investigation of Site 6, the scope of the investigation be expanded beyond the maintenance shop.

Jim Durbin

Community Co-Chair

**Naval Training Center Restoration Advisory Board (RAB) Comments on the Preliminary Assessment (PA) for sites 4, 5, & 6.**

page 3-1, section 3.1.1, sentence 2: "...by the mattress sterilization building (Building 288)..." Did they use DDT or other pesticides to sterilize the mattresses here? What solvents were used?

page 3-3, section 3.3, paragraph 6, sentence 5: "...As the former chevron gas station..." Was the gas station remediated? Did it have a high pressure pipe line?

page 4-1, section 4.1.1, sentence 3: Change "Most likely, the ashes were transported off-site for disposal." to "Disposal of the ashes can not be determined, most likely, the ashes were transported off site for disposal."

page 4-1, section 4.1.2 and section 4.1.3: Attempts should be made to determine chemical(s) used and testing conducted on soaking tanks and sumps.

page 4-1, section 4.1.2 and section 4.1.3: Recommend this paragraph be extended to include a statement explaining the purpose of sumps and soaking tanks in other (similar) installations and --typically--what types of materials might pass into or through them.

page 4-3, section 4.2: General comments:

- a. When were the storm drain channels put into concrete?
- b. Determination should be made as to what materials (heavy metals, hydrocarbons, etc) went into storm drain. If determined to be hazardous, the storm drain channel and outfall should be tested and remediated as necessary
- c. All drains to the bay should be checked and cleaned.

page 4-3, section 4.2, paragraph 2, sentence 5: "...potentially contained many hazardous substances." Recommend consult with other fire fighting schools to determine their use of hazardous substances.

page 4-4, Table 4-1, line 5, column 3: What reference was used to determine insolubility of Xylene? Xylene is insoluble.

page 4-8, section 4.2.3, paragraph 2, sentence 2: "Lead was a trace constituent". Delete the word "trace". Since leaded gasoline was prevalent until recently, lead could be expected to be more than a "trace" element.

page 4-8, section 4.2.4, paragraph 2, sentence 7: "Storage tanks....because no tank dimension..." Was the Navy consulted to determine the "typical" dimensions of UST's placed in similar sites?

page 4-8, section 4.2.5: Were there any separators connected to the sumps?

page 4-8, section 4.2.6: Is form hazardous? What is it made of? Recommend delete last sentence

**Comment:** A map showing the orientation of the firefighter school to existing structures would be beneficial.

page 4-10, Table 4-2: Are these solubility values correct?

page 4-12, section 4-3, sentence 2: "At the...only Triox and calcium arsenate...". Delete the word "only". Calcium arsenate, according to the *Clinical Toxicology of Commercial Products*, has a toxicity rating of 5 on a scale of 1 to 6. Given the toxicity of calcium arsenate, the word "only" to describe their use should be deleted. Information on TRIOX was not found. The RAB requests information on the toxicity and possible carcinogenicity of TRIOX.

**General Comment:** Do records exist that show health claims filed by current or former Department of Navy employees at sites 4, 5, or 6?

page 5-2, Table 5-1: Where does the potential gassing off or volatilization of solvents figure into Table 5-1, Potential Exposure Pathways? Major concern regarding this site is if the volatiles in the firefighting area might be gassing off into the current living structure.

page 5-2 section 5.2, paragraph 2, sentence 1: "Groundwater occurs...artificial fill, at approximately 17 feet bgs in the underlying bay deposits..."Groundwater depths, 17 feet bgs is the underlying bay deposits. What does this mean? It appears inconsistent with the prior statement.

page 5-3, Table 5-1: It seems odd that the tidal fluctuations for 1964, 1984, and 1991 are all identical. Please verify.

page 6-4, section 6.6, sentence 2: "These residential...receive potable water from the Metropolitan Water District." Add "...and to County Water Authority."

page 5-3, section 5-2, paragraph 3, sentence 2: "are probably slow, on the order of 3 to 30 feet per year..." Are groundwater rates of 30 feet a year slow? Given the years the materials have been there, they will have reached the Bay in many cases. This is a somewhat confusing area and should be clarified.

page 7-1, section 7.1.2, sentence 5: "No analytical or circumstantial evidence..." What type of analyses have ever been done of this incinerator? Were samples ever taken to show there was no release? Figure 4-1 shows a "soaking tank". What were they used for? To soak paper in gasoling? Recommend additional effort be made to determine if or what combustion inducing agents may have been used and perhaps a conservative sampling plan could be developed at location of the soaking tanks. The RAB is concerned about potential contamination at the incinerator, and recommends a closer look at this site.

page 7-1, section 7.1.1, sentence 1, Change "...one may only speculate on the likelihood of a suspected release to the soil at this site." to "... the likelihood of a suspected release to the soil cannot be determined."

page 7-3, section 7.1.3: Was consideration given to the washing away of ashes and where it went?

page 7-3, section 7.1.4, sentence 1: Change "It is likely that emissions...could have occurred...." to "It is likely that emissions....did occur..."

page 7.3, section 7.1.4, sentence 4: "Use storage, or disposal..." What were the soaking tanks used for .

page 7-3, section 7.1.5, sentence 3: "However, several UST's were used..." An effort should be made to locate the UST's. Perhaps by overlaying the existing building site plan with the site plan of the former firefighter school or comparing old aerial photographs with those showing the existing facilities, one could get an idea where the UST's were in relation to the buildings. Once you determine where the UST's should have been located, you could do a couple of borings or use a backhoe to pothole around a bit to see if any UST's or evidence of contamination exists, especially in areas accessible (i.e not under a building).

page 7.3, section 7.1.6, sentence 6: "It is unknown if..." Recommend further test be conducted during Site Investigation to determine if UST's still exist.

page 7-3, section 7.1.7: The outfall should be checked to show what may have come out of the drains. Since it is very probable that a large amount of contamination (heavy metals especially, but also petroleum hydrocarbons) may have drained into the boat channel, it seems that it would be very wise to do some sampling in the bottom sediments of the boat channel, and perhaps tissue samples of some of the benthic organisms.

page 7-4, section 7.1.8: Was an attempt made to find out if enough soot accumulated near the former firefighter training school to persist? Was the site excavated or filled when the existing structures were constructed? What was in the soot? Could it be considered carcinogenic? Soot was observed on the ground and on building tops, what happened to the soot? Perhaps when or if an investigation (i.e backhoe potholing or borings) is conducted, soot should be added into the scope of work as something to look and/or test for?

page 7-4, section 7.1.9: Limited soil sampling should be conducted around the golf course maintenance shop to determine if pesticides or petroleum hydrocarbon contamination exists. The areas where dark stained soils were observed should obviously be sampled. Where? How much?, and how deep does it go?

page 7-5, section 7.1.12: Air pathway, DDT was not banned from the military in the 1970's. In addition DDT was found in houses located approximately 1/4 mile from the golf house, but not in the soil. Would suggest the source of DDT would be nearby, i.e. possibly the golf course.

page 7-5, section 7.1.12, sentence 8: Delete the sentence "However, historic nonmilitary use of DDT... in the surrounding area would be difficult." Pesticides can still volatilize from soil if the contamination is there. It is a little disingenuous to all of a sudden blame residential users of DOT for problems. This could be true about all toxins and effects

page 7-5, section 7-2: There could be an affected population (those in Bachelor quarters) if the chemicals in the firefighting pit are volatilizing. This should be added.

page 7-5, section 7.2.1, sentence 5: "With the absence of...human populations are not expected to be affected...at Sites 4, 5, & 6." Groundwater pathway should be of concern for Site 5 since it is close to bay.

page 7-6, section 7.2.2, paragraph 2, sentence 6: "Pesticides, such as DDT... are expected to volatilize...". If DDT is volatile, why should it stay confined to soil? Recommend sampling for DDT and other pesticides around site 6.

page 7-6, section 7.2.3.1, paragraph 2, sentence 3: Delete sentence, "However, civilian populations are restricted from accessing NTC,... would not be allowed." Replace with the following "Civilian population exposure to Site 6 cannot be accurately determined. While access to NTC is controlled, the nature of the highly visible mission of NTC, i.e. recruit training and other schools, provided opportunity for numerous civilians to have access on certain days, i.e. relatives visiting, graduations, and golf playing guests."

page 7-7, section 7.2.3.2, line 8: Delete sentence "Nearby populations...is not possible". Replace with "While access to NTC is controlled, actual dermal contact or ingestion of soil exposure by nearby Rosecrans Street residents cannot be determined". See above.

page 8-1, section 8-1: The RAB recommends further investigation into the contents of the soaking tanks and the sumps at Site 4.

page 8-1, section 8-2: The RAB recommends the following:

- a. An evaluation be done to determine if there is volatilization of contaminants into the buildings.
- b. The outfall sediments be tested.
- c. Determination if UST's are still there.

page 8-2, section 8.3: Since DOT was used widely at this site, the whole golf course was saturated with these herbicides and pesticides. Why is the shop the only focus, why not the whole green? The RAB recommends the following:

- a. That at least samples of the soil and grass be taken to determine if DDT is still there.
- b. Investigate the cost and implement IPM at the golf course in order to stop further contamination.