

Marines Unaware of Risks

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More information about the toxic waste exposure of Marines at the El Toro Air Station is emerging, but government data regarding the site remains elusive.

The now-closed El Toro Marine Air Station in Orange County
Photo by Tim King Salem-News.com

(SOMERDALE, N.J.) - The Marine Corps takes great pride "in taking care of its own", but the Naval services have not done a good job notifying veterans who were stationed at former MCAS Toro that they are at risk for exposure to toxic chemicals as a result of the contamination of the soil and groundwater. Very few know of their exposure.

Marines who served at Camp Lejeune, El Toro and possibly several locations, have been exposed to trichloroethylene (TCE) and Perchloroethylene (PCE), and they may suffer serious health consequences, and have no idea of what hit them. Most Marine and Navy veterans stationed at El Toro have no knowledge of the toxic chemicals found on the base, its place on the EPA Superfund, eventually closure in 1999, and sale at a public auction by the Navy in 2005 to a joint venture for \$650 million.

But it is a fact that a number of Marines report serious illnesses linked to toxic exposure, and neither the Navy nor the Marine Corps have made any attempts to notify El Toro veterans.

TCE and PCE are highly toxic and if not handled and disposed of properly can cause a number of diseases, including cancer and death. In fact, there's no legislation requiring the government to notify veterans when a military base has serious contamination issues, even when the base is an EPA Superfund site and many may be facing life threatening illnesses.

MCAS El Toro was commissioned in 1943 and for many years the base obtained drinking water from fresh water wells on station. In 1997, the EPA confirmed that the aquifers are "not currently a source of municipal water." In late 1969, El Toro obtained its drinking water from the Irvin Ranch Water District. There is no explanation from the Navy for the reason for the purchase of municipal water, but the high salt content (total dissolved solids) in the groundwater may have corroded the wells.

A TCE plume was discovered off base in 1985. Six of the base wells were in the MWSG-37 area (EPA Site 24) in the path of the TCE plume. With the possible exception of one well, the actual dates the wells were abandoned are unknown. Well water may have been used for years after the purchase of municipal water for swimming pools, irrigation, fire service, and washing of aircraft and vehicles. Contaminated well water would have exposed Marines, dependents, and civilian workers to these carcinogens.

MWSG-37 was ground zero for the TCE plume. In 1997 the EPA reported that the MWSG-37 area was the source of the toxic plume. EPA found that: "approximately 1,500 pounds of TCE are estimated to be present in soil gas; an additional 4,000 pounds of TCE would be present in the soil moisture. The mass of TCE in groundwater beneath Site 24 is estimated to be approximately 8,000 pounds."

EPA traced the "hot spot" to MWSG-37's maintenance hangars: "the primary VOC (Volatile Organic Compounds) source is present beneath Buildings 296 and 297, extending to the south with decreasing concentrations to the southern Station boundary. Several smaller source areas exist in the soil beneath Site 24, including a PCE soil gas plume located west of Building 297. The VOC concentrations in soil gas generally increase with depth, and the highest concentrations occur near the water table. VOCs in the area of Buildings 296 and 297 extend to groundwater directly beneath those buildings." How much TCE/PCE was used at El Toro? It's anybody's guess. El Toro kept no TCE usage records. These are not the only records that are missing.

The Navy couldn't locate many records for El Toro's base wells. Detailed construction drawings, missing pumping records and with the possible exception of AW #4, the dates the wells were abandoned are unknown. The first well was destroyed in 1998 and the last in January 2007. AW #4 was the first well destroyed under a permit issued by the Orange County Health Agency. The permits were obtained by the Naval Facility Engineering Command (NAVFAC) Southwest District who contracted for the destruction of the base wells. NAVFAC's decision process on not locating other well screens after the first one was found in the shallow aquifer is questionable and may reflect the Navy's concern with limiting law suits from injured parties.

The location of the well screen determines the first point that water and contaminants can enter the well. For AW #4, the consultant video taped the well, finding that the driller had hand cut vertical slots by torch in the steel casing as a continuous well screen from 210 feet below the ground surface (bgs). The contaminated shallow aquifer under MWSG-37 ran to 260 feet bgs.

This meant that 50 feet of the well screen was in the shallow, contaminated aquifer. Were the other well screens in the shallow aquifer, too? No attempt was made by the Navy to locate the other well screens despite the findings from AW #4 and the obvious importance of this information to the contamination of the base's water supply. Did the driller follow this technique in constructing the other MWSG-37 wells? With the driller's logs and construction drawings missing, only an inspection of the wells could answer this question.

In addition to the well water, the risk of serious illness for those who worked in MWSG-37 in or near the maintenance hangars was high because of exposure to toxic vapors from open containers and from vapor intrusion. Others on the base were at some risk for exposure from vapor intrusion from the contaminated soil and groundwater. If contaminated well water was used in swimming pools and for irrigation, the risk for exposure to these carcinogens through dermal contact is evident. In the words of one toxicologist El Toro "was a toxic waste dump." At least one national law firm has taken an interest in injuries from toxic exposure at El Toro.

Waits & Luxemburg, P.C., a national law firm, advertises on the internet for civilians affected by El Toro's toxic pollution. Marine and Navy veterans are prevented by law from filing tort suits against the government for service connected injuries. There's no legal requirement for the government to notify veterans of exposure to toxic chemicals. Unlike Camp Lejeune where legislation required the Marine Corps to notify veterans of TCE contamination of the water supply, El Toro Marines have not been notified, no legislation is pending, and most Marines are in the dark.

In the absence of political pressure, it's unlikely that the Navy will be forthcoming in disclosing the reasons for the purchase of municipal water, the failure to follow-up on the location of well screens, and the dates the wells were abandoned. Both the purchase of municipal water and the well destruction process raise serious questions: Why purchase water when there's no apparent shortage of water in the aquifer? Why not look for other well screens before destroying the wells? After the municipal water purchase, did El Toro continue to use well water for non-potable purposes? Good questions; no clear answers, yet.

Tim King, reporter for Salem-News Salem-News.com El Toro articles, is doing a series of investigative reports/videos on El Toro. King's reports raise more questions about the base's contamination, the impact on the

local community and the significant amount of money changing hands in the sale of the base to real estate interests. Continuing media attention may help to raise awareness.

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