[redacted] Mr. Thomas Townsend

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Commanding General (Attn: AC/S, EMD 11 SEPTEMBER 2000
Marine Corps Base
PSC Box 2004
Camp Lejeune, NC 28542-0004

SUBJ: Water Quality Monitoring; MCB, CLNC

On several occasions I have inquired why the operators of the MCB, CLNC water system waited until mid 1982 to show some ability to utilize available WQ monitoring techniques that took into account technology, economics, risk analysis, cost-benefit analysis and risk-benefit analysis. I am speaking of the use of THM detection and analysis as a part of a modern WQ monitoring program.

Since 1974, drinking water professionals in the U.S. and Europe have recognized the need to modify traditional chlorine disinfection processes in response to advances in knowledge, particularly about disinfection by-product formation. Some disinfection by-products are known to produce harmful health effects. The importance of this problem, DBPs, is highlighted in this country by the fact that the American Waterworks Association Foundation alone has spent $ 140 million on drinking water research in the last decade, the largest expenditure in drinking water research in the world.

The MCB response to my original question as to why MCB waited until 1982 seems to hinge on the fact that EPA's 1979 adoption of a THM regulation and the inclusion of a MCL for THMs had a long lead-in time available and the DOD took every advantage of that phase-in time to avoid doing what was the best QA technology for the consumer, the military personnel living aboard the Base.

The four NAVFACENGCOM advisories from 18 July 1980 to 25 February 1982 seem to make it clear that compliance could be postponed until the legal implementation date and that is exactly what occurred.

If the MCB had instituted a THM program in 1979 instead of 1982 then perhaps the detection of THMs, the disclosure/discovery of

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VOC contamination and all the ancillary studies (RIFS) could have been completed years earlier and many less personnel exposed to the waterborne VOC contamination.

In my 12 July 2000 letter to the MCB Engineer I asked about the WQ standards used by MCB during 1965-1967 and was told "responsive records for the 1965-1967 time frame could not be located. However, enclosures (6) through (8) may be pertinent."

Record keeping of regulatory materials at Camp Lejeune seems to be a lost art yet there of us exposed to VOCs in the finished water of the HPWTP are expected to find our medical records for the same period.

Be that as it may, enclosure (6) concerned North Carolina law on surface water, enclosure (7) was a BUMED INST of 1972 vintage that did refer back to the 1960 U.S. Public Health Standards indirectly and enclosure (8) was from the water gurus at Port Hueneme (Naval Environmental Protection Support Agency) which provided no answer to the MCB situation.

The fact is that federal standards: U.S. Public Health Service Drinking Water Standards, Revised 1962 were in place until EPA took over after passage of the SDWA and presumably were effective until 24 June 1977 per the Navy Environmental Support office note.

The question remains: what WQ standard(s) did the operators of the HPWTP utilize between 1965-1967? U.S Public Health standards, North Carolina ground water standards, BUMED instructions or a combination?

Primacy issues aside I assume the State of North Carolina had some applicable standards for ground water use at that period; have they been queried on the subject? It seems to me that all water system operators in the State would have some WQ monitoring reporting responsibilities.

The last question involves certification of WQ monitoring personnel at the HPWTP. The MCB answer of "no responsive info ---" is inadequate. A water system the size of

the sewer over at MCB would surely require a certified technician or require the use of an outside, independent laboratory. The latter route was done in 1982, my concern is the technical competency of the Base Chemist in 1965-1967. Perhaps an inquiry on the issue to the North Carolina water resource people or LANTDIV will turn up the certification data. MCB knows the identity of the Base Chemist at that time, his/her write should reflect the certification credentials held by that individual.

NEW, BUT RELATED SUBJECT

The Administrative Record for the MCB/CLWC Installation Restoration Program (IRP) as read from the website does not include the enclosures to most of the documentation in the index. This means that the substantive content of most correspondence is unavailable to the reader who is left with letters of transmittal/cover letters of limited value. This subject has been raised with the LANTDIV Librarian, answer not yet available.

Any comments from the EMD since the Installation Restoration Division is the major CERCLA action element and rationale for an Administrative Record?

The Department of the Navy and the Marine Corps, through the Installation Restoration Division, have made progress in physical recovery of the NPL OU's at Camp Lejeune. It is regrettable that similar efforts have not been made by those agencies to mitigate, inform and restore, in some fashion, the losses of those naval personnel exposed to the long standing contamination caused by their fellow servicemen due to ignorance, negligence and poor planning of decades long past.

Submitted,

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