DATE: 12 February 1982

FROM: Mr. Betz, Quality Control Lab., Environmental Section, NREAB, BMaintDiv

TO: Mr. Sharpe, Supervisory Ecologist, Environmental Section, NREAB, EMaintDiv

SUBJ: Summary of Tribalomethane Monitoring

REF: (a) 10NCAC 10D .1635; Total Tribalomethanes Sampling and Analysis

- 1. Reference (a) is the section of the North Carolina Administrative Code that addresses trihalomethane manitoring. It is congruent with Public Law 93-523, Safe Drinking Water Act (SDWA); Title 40, Code of Federal Regulations, Part 141, "National Interim Primary Drinking Water Regulations"; NAVFAC Instruction 11330.14A, Safe Drinking Water at Navy Shore Activities and Marine Corps Order 6280.3, Safe Drinking Water.
- 2. Reference(a) states that community water systems serving population of 10,000 or more people and add a disinfectant to the waer during the treatment process shall analyze for total trihalomethanes (TTHM). For systems serving 75,00 or more monitoring shall begin not later than 29 November 1980. For systems serving 10,000-74,999 monitoring shall begin not later than 29 November 1982.
- 3. Reference (a) states that analyses shall be performed quarterly and that at least four samples for each plant shall be collected, all in the same 24 hr. period. 25% of the samples shall be taken at locations reflecting the longest time of the water in the system. 75% of the samples shall be taken at locations proportional to the population served. The results of all analyses per quarter shall be arithmetically averaged and reported to the State within 30 days of the system's receipt of such results. All samples collected shall be used in the computation of the average.
- 4. Compliance, according to Reference (a), shall be determined based on a running annual average of quarterly samples collected by the system. If the average of samples covering any 12 month period exceeds the maximum contaminant level, the supplier of water shall report to the Saate and notify the public. Before any system makes any significant modifications to the treatment process to achieve compliance, the system must submit and obtain state approval if the plan for modification and the safeguards used to ensure the bacteriological quality of the water.
- 5. The maximum contaminant level for TTHM of 0.10 mg/l took effect 29 November 1981 for systems serving 75,000 or more. The maximum contaminant level shall take effect 29 November 1983 for systems serving 10,000-74,999.
- 6. The trihalomethane surveillance was arranged by LANTDIV in September 1980. Wallace Carter of LANTDIV stated that only the Hadnot Point and Air Station systems required monitoring, they were the only systems serving 10,000 or more aboard Camp Lejeune. Sampling was initiated by the Quality Control Lab, of the Hadnot Point and the Air Station systems in October 1980. Analysis of the samples had been arranged by LANTDIV to be run by the US Army Environmental Hygiene Agency in their laboratory at Fort McPherson, Ga. The Feredal Registar calls for sampling every three months, however

failed to notify us that the arrangement with the Army was for monthly sampling. idnot learn until December, so there was no Nowwher samples. Due to delays in mailog from Fort McPherson sample containers were not received in time to collect samples for March or May 1981.

- Do to the location of the Chemical Dump and the results of analyses in the area of the Dump, in July 1981, Jerry Wallmeyer of LANTDIV arranged with the Army to increase the tribalomethane surveillance to include the Rifle Range Water System. Jerry Wallmeyer stated that surveillance had been arranged to continue through December 1981. At this time, it was learned that LANTDIV had been receiving the results and were holding them until all had come in. We then requested that the results be sent right away. In the cover letter received from LANTDIV, with the results, LANTDIV stated that no action should be taken on Camp Lejeune's part until LANTDIV made their recommendations in December 1981.
- The Army's lab experience equipment problems that resulted then in a large back log of samples. They stopped sending sample containers for Hadnot Point and The Air Station after September 1981. They continued to sent containers for the Rifle Range, at our request, however they skipped November 1981.
- On the sampling instruction sheet received with each batch of sample containers, The Army surveillance program called for a sample to be taken at the start of the distarbution system, which means five samples were to be collected from each system. Also on the sheet, the point of contact listed for any questions is Mr. Willy, Neal, Chief Chemist, US Army Environmenatl Hygiene Agency, Regional Division-South, Fort McPherson, Ga (Aptovon 588-3234, Commercial 404-752-3234.

Supervisory Chemist