

## **UNITED STATES MARINE CORPS**

MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

IN REPLY REFER TO:

6286 BEMD 2 7 FEB 1995

Mr. Max M. Howie, Jr.
Agency for Toxic Substances
and Disease Registry
Division of Health Assessment
and Consultation
Chief, Program Evaluation, Records,
and Information Services Branch
Mailstop E-56
1600 Clifton Road, N.E.
Atlanta, Georgia 30333

Dear Mr. Howie:

Marine Corps Base, Camp Lejeune has completed its review of the "Public Health Assessment for U.S. MARINE CORPS CAMP LEJEUNE CAMP LEJEUNE, ONSLOW COUNTY, NORTH CAROLINA, CERCLIS NO. NC6170022580, JANUARY 6, 1995." Our comments are contained in the enclosure.

If you have questions or comments, please contact Mr. Neal Paul, Director, Installation Restoration Division, Environmental Management Department, at telephone (910) 451-5068.

Sincerely,

L. H. LIVINGSTON

Brigadier General, U. S. Marine Corps

Commanding General

Encl:

(1) Comments concerning the Public Health Assessment for Marine Corps Base, Camp Lejeune

Copy to: CMC (LFL) CNO (N-45) COMLANTNAVFACENGCOM (Code 18) BUMED (MED-24) NEHC

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## COMMENTS CONCERNING THE PUBLIC HEALTH ASSESSMENT FOR MCB, CAMP LEJEUNE

- 1. Cover page, and inside cover page Title should read: "U.S. Marine Corps Base, Camp Lejeune, Onslow County, North Carolina"
- 2. Summary page, para 2 and page 7, para 2 Should read: "In 1983, Marine Corps Base, Camp Lejeune completed an initial assessment . . ." or "In 1983, MCB, Camp Lejeune completed an initial assessment . . ."
- 3. Page 2, last para, second sentence There are currently 71 wells in operation on-base, vice 68.
- 4. Page 2, last para, last sentence MCB, Camp Lejeune will monitor supply wells annually to ensure the safety of the base drinking water supply.
- 5. Page 3, para 1 What does ATSDR feel is "adequate" fish and shellfish analysis?
- 6. Page 3, para 2 MCB Camp Lejeune has scheduled a removal action to dispose of the "tanks or metallic debris" in the Spring of 1995. The Final Remedial Investigation, which will address potential soil contamination, will be complete in January 1996.
- 7. Page 7, para 5, last sentence Public repositories are located at the Onslow County Public Library and Building 67, Room 238, MCB, Camp Lejeune. There is no longer a public repository at the MCB, Camp Lejeune Library.
- 8. Page 11, para 2 The drinking water systems discussed are medium sized, vice major, drinking water systems and small sized, vice minor, drinking water systems.
- 9. Page 19, para 3 MCB, Camp Lejeune relocated the Day Care Center, not the Marine Corps.
- 10. Page 21, para 2 Is there any data accounting for exposures that are not in the "worst case" scenario. In other words, what concentrations would be used for estimating exposure doses that are more likely to be encountered for this situation? It should be noted that the ATSDR's conservative approach is not representative for all the people who can be exposed.
- 11. Page 21, para 6 There are only **two** individual lawn care workers who work on this site, not five .
- 12. Page 24, para 3, last sentence The recommendation that exposure be stopped is unnecessary. MCB, Camp Lejeun leted a Time Critical Removal Action which removed contaminated soil from this site.

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## COMMENTS CONCERNING THE PUBLIC HEALTH ASSESSMENT FOR MCB, CAMP LEJEUNE

- 13. Page 25, para 2, last sentence What type of education does ATSDR recommend for the workers in Building 712? MCB, Camp Lejeune provided education and guidance to these workers during the Time Critical Removal Action.
- 14. Page 27, C., next to last sentence What epidemiological studies suggest this association? Please list in the text or references section.
- 15. Page 33, para 4, sentence 3 Cite the specific epidemiologic studies that suggest the possibility that pregnant women exposed to Volatile Organic Compounds (at levels similar to those detected at MCB Camp Lejeune) may have an increased risk of adverse pregnancy outcomes either in the text or references section.
- 16. Page 34, para 1 The first sentence indicates the known (documented) human exposure period of 34 months. The next to last sentence in this paragraph indicates the known exposure period to extend from 1980 to 1985. The next paragraph indicates known exposure as 1982 to 1985. These inconsistencies are confusing.
- 17. Page 40, para 1 The last sentence indicates that the source of mercury was from the photographic lab. The actual source was from delay lines in radar units operated at the Marine Corps Air Station, New River.
- 18. Page 40, para 2 and page 42, Conclusion #1 In the Final Remedial Investigation Report for Operable Unit No. 3 (Site 48) that we provided ATSDR, the mercury was reportedly carried by hand and dumped or buried in small quantities at random areas behind Building AS804.
- 19. Page 42, Completed Action This sentence should read: "MCB, Camp Lejeune has completed the Remedial Investigation Report, Proposed Remedial Action Plan, and a signed Record of Decision for Operable Unit No. 3 (Site 48)". Not ". . . has completed the Remedial Investigation Remedial Investigation, Proposed Remedial Action Plan . . ."
- 20. Page 42, Conclusion 1. Site 48 Mercury levels surface water and sediment are not significantly elevated when compared to data from other sites at MCB, Camp Lejeune which do not have a history of mercury disposal. Therefore, just because mercury was detected in samples collected from the New River and surrounding marsh areas does not suggest that mercury was disposed in the New River at Site 48. It should be noted that samples collected from the New River and the tributary at an upstream location GLEW far from Site 48) exhibited similar mercury levels when compared

## COMMENTS CONCERNING THE PUBLIC HEALTH ASSESSMENT FOR MCB, CAMP LEJEUNE

to samples collected near Site 48, including the marsh. that upstream samples exhibited similar mercury levels does not support ATSDR's first conclusion.

- Page 42, Conclusion 2. The collection of fish for tissue analysis coincided with the collection of fish for population statistics for use in the ecological risk assessment. In this sampling effort, over 5,000 individuals representing 11 species of fish were collected. In addition, over 50 blue crabs were collected. Thus, a large sample of fish species were evaluated for selection of fish for tissue analysis. Of these samples, a total of 11 composite samples representing five fish species and three composite samples of blue crabs were analyzed. Based on these composite samples, a human health risk assessment was conducted for estimating the adverse health effects from the ingestion of fish. The risk assessment showed that the carcinogenic risks were within the United States Environmental Protection Agency (USEPA) acceptable risk range and there were no noncarcinogenic risks.
- Page 42, Recommended Actions 1. 11 composite fish samples and three composite blue crab samples were analyzed for tissue contaminant level using procedures required for Superfund investigations. Composite samples have been, and will continue to be, obtained at other sites along the New River in conjunction with hazardous waste site investigations.
- Page 42, Recommended Actions 2. A literature review was conducted to determine the fish species that may potentially be exposed to contaminants in the New River. This review included compiling information from Federal and State natural resources agencies as to the type of fishes that are caught in the New In addition, representatives from the USEPA and the North Carolina Department of Environment, Health, and Natural Resources were contacted concerning method of preparation, species caught, and consumption rates. Finally, the Environmental Management Department at Camp Lejeune surveyed local fishermen and marinas in regards to local fishing practices. The composite fish and blue crab composite samples were analyzed for Total Compound List organics and Total Analyte List inorganics using Contract Laboratory Program procedures. The low levels of other contaminants in the fish tissue indicate the exposure of fish to sediments is not resulting in a significant bioaccumulation of these contaminants.
- Page 43, Completed Action The Final Remedial Investigation, which will address potential soil contamination, for Site 43 is scheduled to be completed in January 1996. removal action to remove and dispose of the "tanks and metallic debris" is scheduled to commence in the Spring of 1995. CLW