



UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542-5001

IN REPLY REFER TO:

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SJA41

12 APR 1988

From: Staff Judge Advocate, Marine Corps Base, Camp Lejeune
To: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune

4/12/88

Subj: PUBLIC NOTIFICATION OF LEAD IN DRINKING WATER

Ref: (a) AC/S, Fac Action Brief of 4Apr88
(b) Safe Drinking Water Act (as amended by PL 99-339, June 19, 1986)
(c) 52 Fed. Reg. 41534, EPA Final Rule; Public Notification of Drinking Water Regulations
(d) NIS inves rpt 05LE-1145-4GM1 of 5Feb88

Encl: (1) Notice to Marine Corps Base Camp Lejeune Water System Customers

1. I have reviewed reference (a) and its proposed notification and provide the following comments and recommendations:

a. Section 1417 of the Safe Drinking Water Act, reference (b), and reference (c) explicitly require public notifications to include an explanation of the following:

- (1) The potential sources of lead in the drinking water.
- (2) Potential adverse health effects.
- (3) Reasonably available methods of mitigating known or potential lead content in drinking water.
- (4) Any steps the system is taking to mitigate lead content in drinking water.
- (5) The necessity for seeking alternate water supplies, if any.

As stated in reference (c), the above listed items constitute the minimum language to be contained in such a notice. The enclosure to reference (a) does not explain whether there is a need to seek alternative water supplies, and in my opinion, added explanation should be provided to the explanations of the other four required topics. Accordingly, I have modified the notice, adding greater detail and explanation. I recommend publishing enclosure (1), the modified notice.

b. In enclosure (1), in response to the questions regarding what Camp Lejeune is doing to mitigate lead concentration, I have added a measure which must be underscored: the need for

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Camp Lejeune to install nothing but "lead-free" pipe, solder, and flux in all plumbing connected to the Camp Lejeune water system and to require private contractors to do the same. The Safe Drinking Water Act requires the use of such "lead-free" materials on and after 19 June 1988. For the purposes of the Safe Drinking Water Act, "lead-free" means:

(1) For solders and flux: Not more than 0.2 per cent lead.

(2) For pipes and pipe fittings: Not more than 8.0 per cent lead.

The requirement for the use of "lead-free" pipe, solder, and flux does not apply to leaded joints necessary for the repair of cast iron pipes.

c. Camp Lejeune must not only require private contractors to use "lead-free" pipe, solder, and flux for all plumbing connected to Camp Lejeune's water system, but must also enforce contractual provisions which mandate adherence to those standards. My concern about enforcement arises from an NIS report, reference (d), which reports an instance in which a private contractor substituted 50/50 solder wire for the contractually required 95/5 "lead-free" solder wire. Once the Safe Drinking Water Act "lead-free" requirements become enforceable (19 June 1988), Camp Lejeune will be duty-bound to more closely supervise and enforce the "lead-free" standards discussed above.

d. Reference (c) lists three options for the manner of notice. One is "newspaper notice" (one for each of three consecutive months). Reference (c) provides guidance regarding the definition of "newspaper notice". The requirement can be satisfied in several ways:

(1) Take out a notice in a newspaper's legal notice section.

(2) Purchase prominent feature space.

(3) Write an article on the subject as a news story.

(4) Make space for the notice available as a public service announcement.

Additionally, reference (c) states: "Each notice shall be conspicuous, shall not...contain unduly small print, or similar problems that frustrate the purpose of the notice." With this guidance in mind, I concur with the recommendation to publish the notice in the Globe once a month for three consecutive months. In order to reach those consumers who work or live aboard Camp Lejeune and do not read the Globe, I also recommend publication

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of the notice in one of the aforementioned methods in the Jacksonville Daily News once a month for three consecutive months.

A. P. Tokarz
A. P. TOKARZ

Recommendation

1. JPAO publish enclosure (1) as the required public notification regarding lead in drinking water.

AC/S, Fac	JPAO	C/S	CG
<i>✓</i> C NC	<i>SW</i> ^{MR} C NC	<i>W</i> C NC	A D

2. JPAO publish the notification in both, the Globe and Jacksonville Daily News.

<i>✓</i> C NC	<i>Sell</i> ^{MR} C NC	<i>W</i> C NC	A D
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- C- Concur
- NC- Non-concur
- A- Approve
- D- Disapprove

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NOTICE TO MARINE CORPS BASE CAMP LEJEUNE WATER SYSTEM CUSTOMERS

The United States Congress amended the Safe Drinking Water Act in 1986 (Public Law 99-339). One requirement of this Act is that all people using a public water system should be notified of the potential for exposure to lead through the water distribution system and the plumbing in individual homes. All public water systems are required to make this notification even if there is no evidence of lead contamination and the drinking water complies with the Standards established by EPA.

Q. WHERE DOES LEAD COME FROM?

- A. Lead accumulates in the body from three potential sources. The major source is food, followed by air and drinking water.

Lead has been a common component of the materials used in the construction of water distribution systems and household plumbing throughout the centuries. While water supply systems no longer use lead joints and services, some older parts of existing systems may contain lead.

Lead is also commonly found in the soldered joints and the plumbing fixtures of older as well as modern homes and buildings. All water, even that which has been treated to reduce corrosiveness, can cause traces of lead to dissolve in the drinking water.

Lead levels in your drinking water are likely to be highest:

- If your home or water system has lead pipes, or
- If your home has copper pipes with lead solder, and
- If the home is less than five years old, or
- If you have soft or acidic water, or
- If water sits in the pipes for several hours.

Q. WHAT ARE THE HEALTH EFFECTS OF LEAD?

- A. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The

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greatest risk, even with short-term exposure, is to young children and pregnant women.

Q. WHAT CAN I DO ABOUT LEAD?

A. You can take two immediate steps.

The first step is to refrain from consuming water that has been in contact with your home's plumbing for more than six hours, such as overnight or during your work day. Before using water for drinking or cooking, "flush" the cold water faucet by allowing the water to run until you can feel that the water has become as cold as it will get. You must do this for each drinking water faucet (taking a shower will not flush your kitchen tap). Buildings built prior to about 1930 may have service connectors made of lead. Letting the water run for an extra 15 seconds after it cools should also flush this service connector. Flushing is important because the longer water is exposed to lead pipes or lead solder, the greater the possible lead contamination. (The water that comes out after flushing will not have been in extended contact with lead pipes or solder.)

The second step is to never cook with or consume water from the hot-water tap. Hot water dissolves lead more quickly than cold water, so do not use water taken from the hot tap for cooking or drinking, and especially not for making baby formula. (If you need hot water, draw water from the cold tap and heat it on the stove.) Use only thoroughly flushed water from the cold tap for any consumption.

Q. WHAT IS CAMP LEJEUNE DOING ABOUT LEAD?

A. Camp Lejeune is taking several measures to reduce lead concentrations in the Camp Lejeune drinking water. Camp Lejeune monitors lead concentrations and other possible contaminants at all six of Camp Lejeune's plant distribution points. The last required testing disclosed lead concentrations at 0.005 parts per million (ppm), well below the current EPA standard. In fact, EPA has proposed a lower standard for lead, 0.020 ppm, and Camp Lejeune's limits would be well below this proposed stricter standard. Camp Lejeune is currently negotiating a contract for a private, North Carolina and EPA qualified laboratory to conduct lead testing in 1988. Camp Lejeune is also implementing the recent changes in the Safe Drinking Water Act. These changes require the use of "lead-free" pipe, solder, and flux in the installation, or repair of plumbing connected to a public water system. Camp Lejeune will only utilize "lead-free" pipe, solder, and flux in the future and will contractually require private contractors to utilize the same "lead-free" materials.

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Q. SHOULD I SEEK ALTERNATIVE SOURCES OF DRINKING WATER IF I WORK OR LIVE ABOARD CAMP LEJEUNE

A. No. Camp Lejeune's water is quite safe to drink by all. As explained earlier, the lead concentrations at Camp Lejeune are well below the existing EPA standards, and well below EPA's much stricter proposed standard. Testing of the drinking water for other contaminants is conducted on a regularly scheduled basis by the Base Natural Resources and Environmental Affairs Division (NREAD). The Base NREAD laboratory is state certified for such water monitoring. The two recommended precautionary measures mentioned earlier should be taken wherever you drink water, whether on- or off-Base.

If you desire further information regarding your water supply, please contact the Assistant Chief of Staff, Facilities at 451-3034/3035 (on-Base) or the U.S.E.P.A. (on- or off-Base) at 1-800-426-4791 or order the pamphlet Lead and Your Drinking Water from U.S. Environmental Protection Agency, Washington, D.C. 20460

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