



MCB, CAMP LEJEUNE RIFLE RANGE WATER SYSTEM

(PWS ID#: 04-67-046)

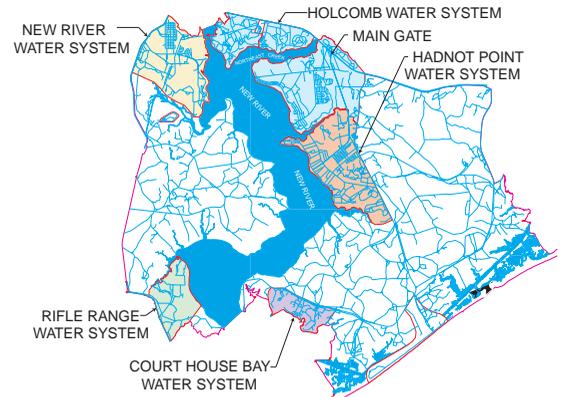


1999 WATER QUALITY REPORT

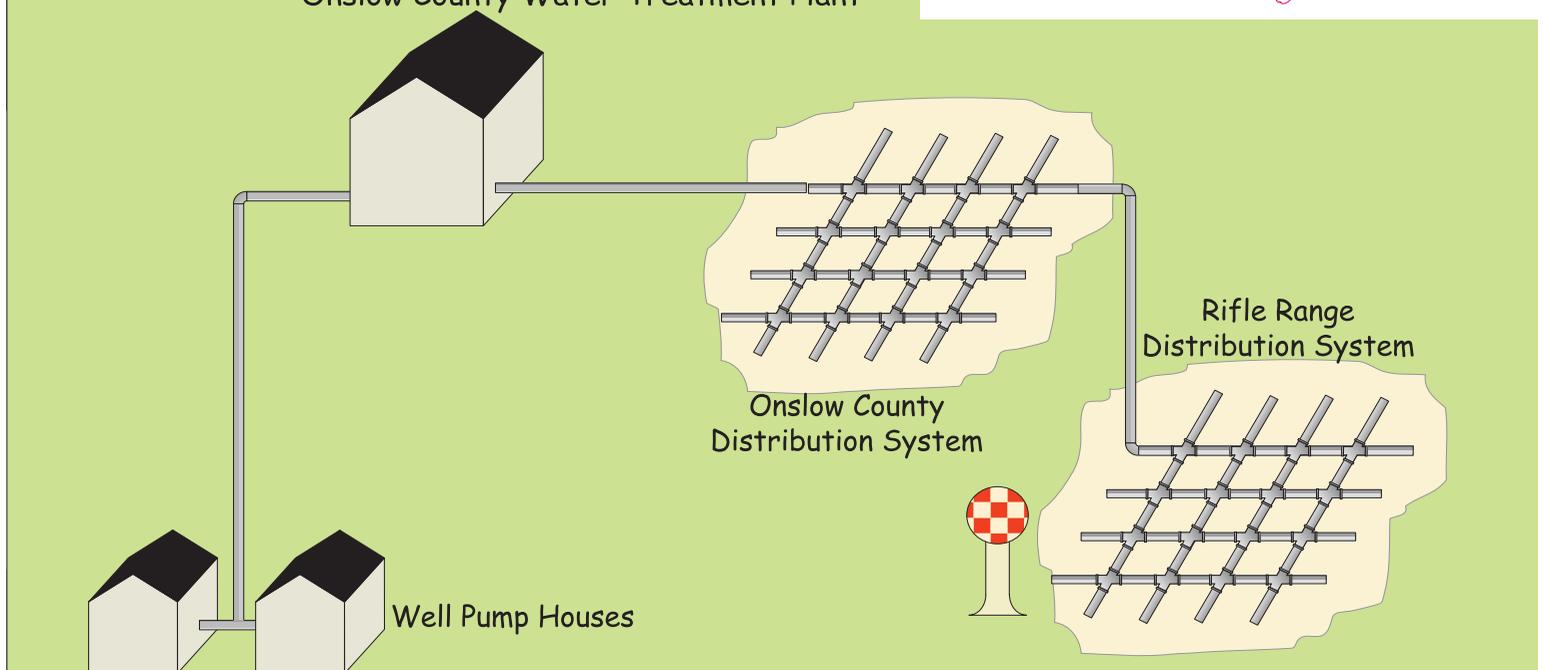
PROVIDING HIGH QUALITY WATER TO OUR TROOPS AND THEIR FAMILIES

MCB, Camp Lejeune is committed to providing you with drinking water that is safe and reliable. We believe that providing you with accurate information about your water is the best way to assure you that your water is safe. This 1999 Water Quality Report will explain where your water comes from and lists all of the contaminants detected in your drinking water. Important health related information concerning your drinking water is also contained in this report.

The MCB, Camp Lejeune Rifle Range Water System is supplied drinking water from Onslow County. Onslow County obtains raw water from the



Onslow County Water Treatment Plant



Black Creek and Castle Hayne groundwater aquifers. Onslow County maintains and operates a series of groundwater pumps that are used to withdraw raw water from these aquifers and transfer the raw water to Onslow County's Water Treatment Plant. At the treatment plant licensed operators are responsible for using state-of-the-art equipment to remove contaminants from the water. As the water is pumped from the water treatment plant, chlorine is added to protect against microbial contamination. This treated water passes through the Onslow County water distribution system and then to the MCB, Camp Lejeune

The blue area represents an aquifer, which is a collection of water beneath the ground

Rifle Range Water System. Onslow County and MCB, Camp Lejeune are both responsible for testing your water supply to ensure that it is safe to drink. We are happy to report that of the more than 80 contaminants that the water was tested for during the 1999 monitoring period, none of the contaminants were detected at concentrations that exceeded the Maximum Contaminant Levels set by the United States Environmental Protection Agency or the State of North Carolina.

Detected Contaminant Table - Results for 1999 (as required by the National Primary Drinking Water Regulation)

Regulated contaminants detected during monitoring

Substance	Likely Source	Range	Avg. Level	MCL	MCLG	Unit	Exceeds EPA Standards?
Fluoride ¹	water additive to promote strong teeth	0.76-1.08	0.94	50	N/A	ppm	no

Substance	Likely Source	Range Detected	Highest average	MCL	Units	Exceeds EPA Standards?
Trihalomethanes	by-product of drinking water chlorination	65.8-73.0	69.4	100	ppb	no

Substance	Likely Source	90th percentile	MCL	MCLG	Units	# of sites exceeding AL
Lead	corrosion of household plumbing systems; erosion of natural deposits	5	15 (AL)	0	ppb	2
Copper	corrosion of galvanized pipes; erosion of natural deposits; leaching from wood preservatives	0.325	1.3 (AL)	1.3	ppm	0

Unregulated contaminants detected during monitoring

Substance	Likely Source	Range	Avg. Level	MCL	Unit
Bromodichloromethane ¹	By-product from the disinfection of drinking water	0.9 - 8.2	4.6	none	ppb
Chloroform ¹	By-product from the disinfection of drinking water	1.3 - 53.5	27.4	none	ppb
Sulfate ¹	Leaching from naturally occurring mineral deposits	N/A ²	4	none	ppm

¹ Contaminant not tested for in 1999. Contaminant concentration data from 1998 is reported.
N/A = Not applicable

² Reported contaminant concentration is from one sample

Drinking Water and Your Health

Inadequately treated water may contain disease-causing organisms. These organisms include bacterial, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Center for Disease Control (CDC) provide guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Act Hotline (1-800-426-4791/ www.epa.gov/ogwdw).

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Definitions

Action Level (AL) - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

Coliform - A group of bacteria commonly found in the environment. They are an indicator of potential contamination of water. Adequate and appropriate disinfection effectively destroys coliform bacteria.

Disinfection - A process that effectively destroys coliform bacteria.

Contaminant - Any natural or man-made physical, chemical, biological, or radiological substance or matter in water, which is at a level that may have an adverse effect on public health, and which is known or anticipated to occur in public water systems.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Nitrates - A dissolved form of nitrogen found in

fertilizers and sewage by-products which may leach into groundwater and other water sources. Nitrates may also occur naturally in some waters.

NTU (nephelometric turbidity unit) - A measure of the clarity of water.

Pathogens; disease-causing pathogens; waterborne pathogens - A pathogen is a bacterium, virus or parasite that causes or is capable of causing disease. Pathogens may contaminate water and cause waterborne disease.

pCi/L, picocuries per liter - A measurement of radiation released by a set amount of a certain compound.

pH - A measure of the acidity or alkalinity of water.

ppb, ppm - part per billion, part per million. Measurements of the amount of contaminant per unit of water. A part per million is like one cent in \$10,000 and a part per billion like one cent in \$10,000,000.

Trihalomethanes (THM) - Four separate compounds (chloroform, dichlorobromomethane, dibromochloromethane, and bromoform) that form as a result of disinfection.

Treatment Technology (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Turbidity - A measure of the cloudiness of water caused by suspended particles.

Understanding Your Drinking Water

We routinely monitor your drinking water for nearly 80 drinking water contaminants. Contaminants that have been identified in your drinking water include barium, fluoride, gross beta, lead, copper, and total trihalomethanes.

All of these contaminants were detected at concentrations well below the USEPA and the State of North Carolina MCLs.

Rifle Range Elevated Drinking Water Storage Tank



Through uncompromising vigilance, your water is monitored to ensure that it meets all USEPA and North Carolina water quality standards. Water quality is of the utmost importance. However, obtaining the water from the ground, treating it, and delivering it to your tap is equally important. The utility staff and personnel from many supporting divisions at MCB, Camp Lejeune, such as the Environmental Management Division, continuously evaluate the complex operations of the water system. Your water system is comprised of a sophisticated water treatment plant, associated instruments, piping systems, pumps, and tanks. The goal of the many people involved with operating the water system is to optimize system performance and to ensure that it operates effectively, efficiently and safely. Annually, numerous system components are cleaned, maintained, replaced, and upgraded when needed. For example, throughout the Rifle Range piping system, old cast iron piping is being replaced by modern PVC piping. Pipe replacement projects ensure that the high quality water produced at the water treatment plant remains that way until it reaches your faucet. This is just another example of our commitment to provide you with the best water available.

NEED MORE INFORMATION? - TRY ANY OR ALL OF THE FOLLOWING

Questions about your 1999
Water Quality Report should
be directed to the following:

On Base:
Director
Utilities Branch
Tele: 451-5024

Off Base:
Consolidated Public Affairs
Office
Tele: 451-7413 or 7440

USEPA's
Safe Drinking Water HOT LINE
1 (800) 426-4791



Visit the USEPA's Website at:
<http://www.epa.gov/safewater>



Visit MCB Camp Lejeune's Web Site for
additional information sponsored by the
Environmental Management Division
www.lejeune.usmc.mil/emd

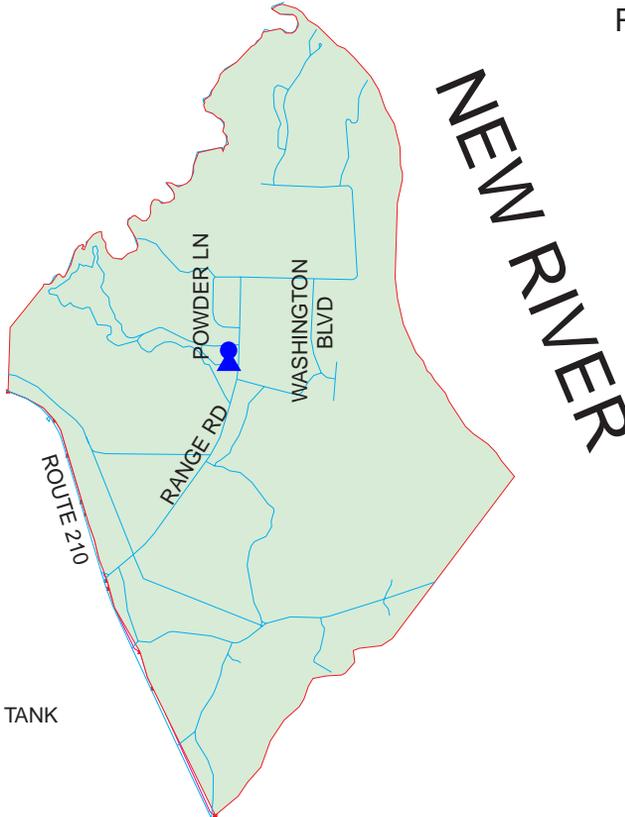
RIFLE RANGE WATER SYSTEM



Marine Corps Base
Camp Lejeune, NC

1999 WATER QUALITY REPORT

Area Included:
Rifle Range



ELEVATED WATER TANK



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