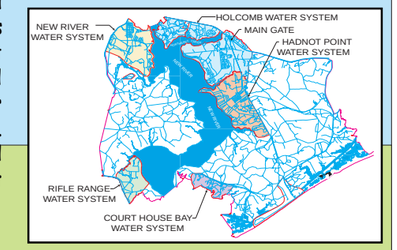
MCB, CAMP LEJEUNE
MCAS, NEW RIVER WATER SYSTEM

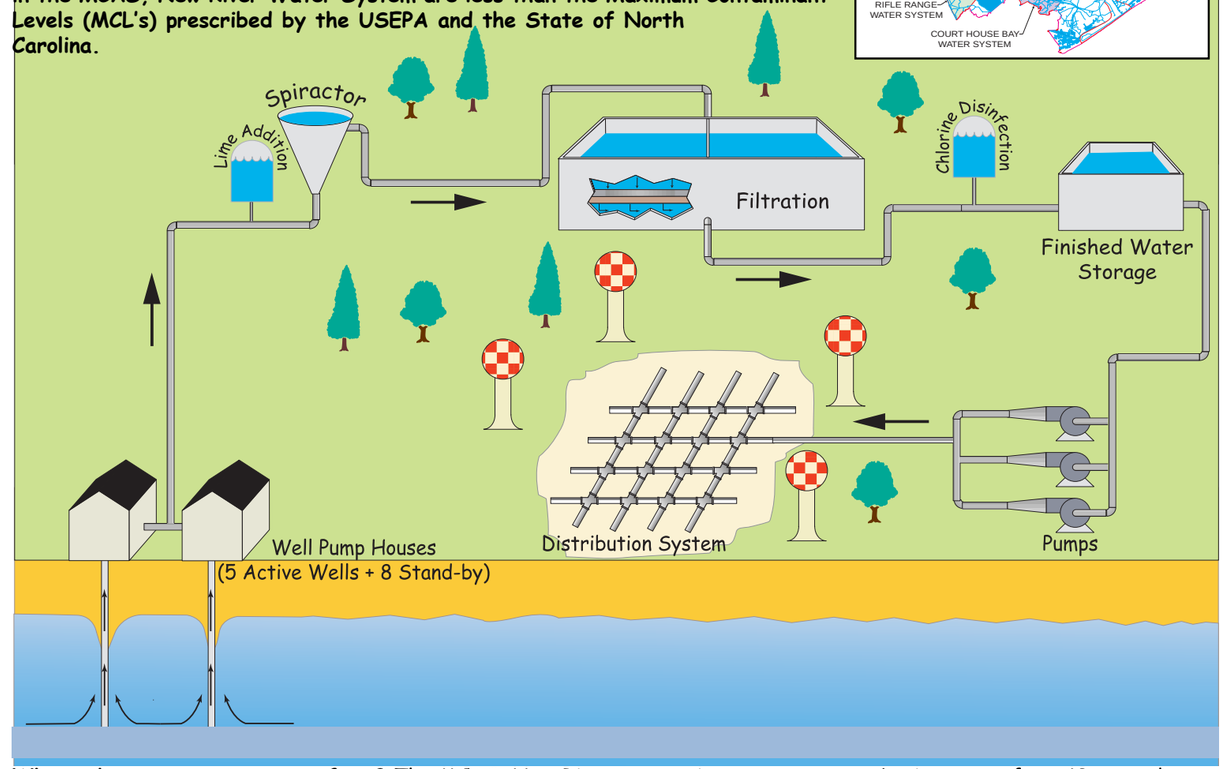
(PWS ID#: 04-67-042)

2001 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 2001 Water Quality Report for the MCAS New River Water System explains where your water comes from and lists all of the contaminants detected in your drinking water. We routinely test your water for over 80 different EPA regulated chemical and microbiological contaminants. **We are happy to report that the concentrations of regulated parameters detected in the MCAS, New River Water System are less than the Maximum Contaminant Levels (MCL's) prescribed by the USEPA and the State of North Carolina.**





Where does your water come from? The MCAS, New River community water system obtains water from 13 groundwater wells located in the Verona Loop area. Groundwater is pumped from the Castle Hayne freshwater aquifer approximately 183 feet below the ground. This water is relatively free of contaminants. It is pumped from the wells to a water treatment plant located on the air station. The water enters the water treatment plant and is pumped into a set of cone-shaped devices called spiractors. The spiractor is used to soften the water by removing minerals from the water. The water is then passed through a set of filters, which contain layers of sand and carbon, to remove particles through a process called Filtration. The clean water is then placed in a large storage tank called a clearwell. When water is needed by customers, the water is pumped from the clearwell, chlorine is added (to protect against microbial contamination) and distributed throughout the MCAS New River community water system.

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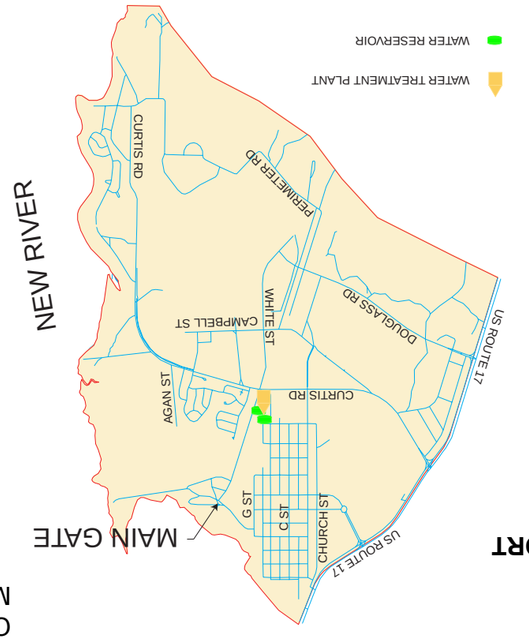

Areas Included:
Camp Geiger
MCAS New River

Marine Corps Base
Camp Lejeune, NC

2001
WATER QUALITY REPORT

MCAS NEW RIVER WATER SYSTEM

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

Questions about your 2001 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

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. The contaminants listed in the following tables are the only contaminants detected in your drinking water. All of these contaminants were detected at concentrations well below the USEPA and the State of North Carolina MCLs. For a complete list, contact the MCB, Camp Lejeuene Public Affairs Office.

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 MCAS, New River 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.

MCAS, New River Water Treatment Plant

Detected Contaminant Table - Results for 2001
(as required by the National Primary Drinking Water Regulation)

Regulated contaminants detected during montoring

Substance	Likely Source	Range Detected	Highest Average	MCL	Units	Exceeds EPA Stds?
Trihalomethanes	By-product of drinking water chlorination	N/A	62.1	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	9	15 (AL)	0	ppb	2
Copper	corrosion of galvanized pipes; erosion of natural deposits; leaching from wood preservatives	<0.050	1.3 (AL)	1.3	ppm	0

AL-Action Level

Unregulated Volitile Organic Compounds (VOC's) detected during monitoring

Substance	Likley Source	Range	Avg Level	MCL	Unit	Exceeds EPA Standards?
Chloroform	By-product from the disinfection of drinking water	N/A	39	None	ppb	No
Bromoform	By-product from the disinfection of drinking water	N/A	.8	None	ppb	No
Bromodichloromethane	By-product from the disinfection of drinking water	N/A	15	None	ppb	No
Chlorodibromomethane	By-product from the disinfection of drinking water	N/A	7.3	None	ppb	No

Drinking Water and Your Health

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, 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 that 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 a small amount 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).