

2003

## Annual Consumer Confidence Report on the Quality of Keyport Drinking Water Naval Undersea Warfare Center Division, Keyport

*This is an annual report on the quality of water delivered by Naval Undersea Warfare Center, Division Keyport (NUWCDIVKPT). Under the “Consumer Confidence Reporting Rule” of the Federal Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to their customers. Presented in this report is information on the source of our water, its constituents, and the health risks associated with any contaminants. Our water is safe to drink. Please read on for a full explanation of the quality of our water.*

### Background Information

In general, sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;
- B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems;
- E. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. The Department of Agriculture’s regulations establishes limits for contaminants in bottled water, which must provide the same protection for public health. 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 Environmental Protection Agency’s Safe Drinking water Hotline at 800-426-4791.

**At Division Keyport, we continually monitor the drinking water for contaminants.** The table below shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2003. Our water is safe to drink; however, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system 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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking water Hotline at 800-426-4791.

The drinking water delivered to you is pumped from a groundwater source known as the “fourth aquifer below ground surface,” through an 800-foot well, located on base.

## Monitoring of Your Drinking Water

The water system uses only EPA-approved laboratory methods to analyze your drinking water. Water samples are drawn from the wellhead and residential taps by our personnel; samples are then shipped to an accredited laboratory where a full spectrum of water quality analyses are performed. The contaminant groups listed in column 1 in the table below, are monitored using EPA approved methods. Column 2 of the table specifies the monitoring frequency.

### Sampling Schedule

Analyte/Contaminant Group	Monitoring Frequency
Biological contaminants (total coliform group)*	2 samples every month
Asbestos	1 sample collected every 9 years
Lead and copper	Sampled every three years
Volatile Organic Compounds	No sample required through 2004
Inorganic contaminants (IOC)**	1 sample every year
Herbicides	No sample required through 2004
General Pesticides	No sample required through 2004
Insecticides	No sample required through 2004
EDB and other soil fumigants	State Waiver through 12/2004
Synthetic Organic Chemicals	State Waiver through 12/2004
Nitrates	1 sample every year
Radionuclides	1 sample every 3 years

\*Contaminants in this group include total coliform, fecal coliform, and Heterotrophic bacteria

\*\*Contaminants in this group include metals, nitrate, fluoride and asbestos

### Definitions of Key Terms

To gain a better understanding of the content of this report, several key terms must be defined. These are as follows:

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.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Under the Safe Drinking water Act, the EPA establishes these MCLs for compliance purposes.

The Division Keyport water system is analyzed for contaminants such as lead and copper, which are governed by action levels (ALs), and not MCLs. Additionally, the water system is analyzed for contaminants that are subject to treatment techniques. To aid in understanding, definitions of these terms are provided below:

Action Level (AL) – The concentration of a contaminant, which, if exceeded, triggers treatment techniques or other requirements, which must be followed.

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

## Additional Acronyms/Terms Used in This Report

Below is a listing of acronyms and terms (with explanations) used in this Consumer Confidence Report:

CCR	Consumer Confidence Report
SDWA	Safe Drinking Water Act: Federal law setting drinking water requirements
ppm	Parts per million; a unit of measure equivalent to a single penny in \$10,000
ppb	Parts per billion; a unit of measure equivalent to a single penny in \$10,000,000
ppt	Parts per trillion; a unit of measure equivalent to a single penny in \$10,000,000,000,000
mg/kg	Milligrams per kilogram; a unit of measure equivalent to a part per million (ppm)
mg/L	Milligrams per liter; a unit of measure equivalent to a part per million (ppm)
µg/L	Micrograms per liter; a unit of measure equivalent to a part per billion (ppb)
mrem/yr	Millirem per year; a measure of radioactivity in water
pCi/L	Picocuries per liter; a measure of radioactivity in water
MFL	A million fibers per liter; a measure of asbestos in water.
NTU	Nephelometric turbidity unit; a measure of turbidity in water
TTHMs	Total trihalomethanes; by-products of drinking water disinfection
Level Found	Laboratory analytical result for a contaminant; this value is evaluated against an MCL or AL to determine compliance
Range	The range of the highest and lowest analytical values of a reported contaminant. For example, the range of reported analytical detections for an unregulated contaminant may be 10.1 ppm (lowest value) to 13.4 ppm (highest value). EPA requires this range to be reported for certain analytes.
N/A	Not applicable

The following table presents the results of our most recent monitoring showing detections.

Chemical	MCL	Level detected	Range	Sample Date	Exceeded Standard ?	Likely Source of Contaminant
Manganese	0.05 mg/L	0.03mg/L	n/a	7/8/03	no	Naturally occurring in water
Lead	0.015 mg/L (AL)	0.004 mg/L*	0*****	6/03	no	Corrosion of household plumbing systems, erosion of natural deposits
Copper	1.3 mg/L (AL)	<(0.2) mg/L*	0*****	7/00-9/00	no	Corrosion of household plumbing systems, erosion of natural deposits
Total Trihalomethanes	100 µg/L	10.1 µg/L	n/a	11/2/00 **	no	By product of drinking water chlorination
Total coliform	1***	0	n/a	N/A	no	Naturally present in the environment
Fecal coliform	1***	0	n/a	N/A	no	Human and animal fecal wastes

\*This value represents the 90<sup>th</sup> percentile value of the 2000 round of sampling

\*\*This state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

\*\*\*MCL represents the presence of coliform bacteria in one or more samples per month.

\*\*\*\* This value represents the total number of sampling sites that exceed the action level

## **Detected Contaminants**

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The table only lists those contaminants that had some level of detection. Many other contaminants have been analyzed also, but were not present or were below the detection limits of the lab equipment.

## **Protecting Our Water Supply**

NUWC's groundwater source is managed in accordance with State and Federal regulations and best management practices for water supply systems. Access to the wells is secured, and limited to water supply activities. The facilities are monitored and patrolled. **Any suspicious activities should be noted and called in to the trouble desk at 360) 396-4341 or 360) 396-4444.**

## **Public Involvement**

Sampling results, water system construction data and planning information can be obtained by contacting Paul Taylor, Naval Base Kitsap-Bangor Public Affairs Officer, at 360) 396-1631.