

2003 Annual Consumer Report on the Quality of Tap Water for Tobyhanna Army Depot

Introduction

Last year, as in years past, your tap water met all Environmental Protection Agency (EPA) and state drinking water health standards. Tobyhanna Army Depot (TYAD) vigilantly safeguards its water supplies. This brochure is a snapshot of last year's water quality. This is the sixth annual report on the quality of water delivered by TYAD. Under the "Consumer Confidence Reporting Rule" of the Safe Drinking Water Act, starting in 1999, community water systems have been required to report their water quality information to their consumers.

Background

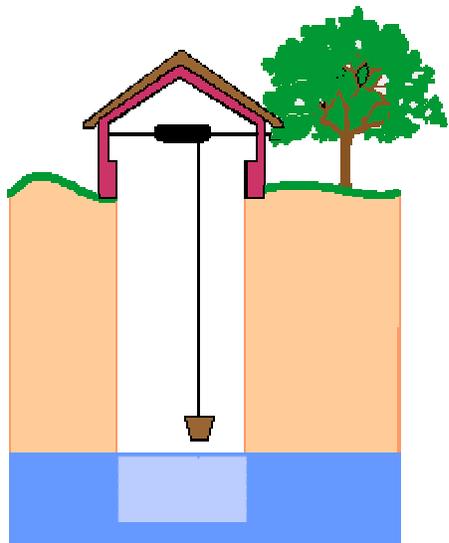


The sources of drinking water in the United States (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Examples of what 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, and wildlife. (B) Inorganics, 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 chemicals, 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, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish 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 of these substances. Their presence does not necessarily indicate that the water poses a health risk. More information about their potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons 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/Centers for Disease Control and Prevention (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.

Your drinking water is pumped from groundwater sources via six deep wells located on the installation. The system is monitored using the Facility Environmental Management and Monitoring System (FEMMS). FEMMS allows the operators to monitor well status, chemical feed levels, disinfection system status, and storage tank levels via a dedicated fiber optic network on a 24-hour basis.



Well depths vary from 180 to 450 feet deep. One source well (Well #3) contains low levels of trichloroethylene (TCE), a chemical that was used as a cleaner or degreaser. Studies indicate the TCE entered the ground during construction of the depot in the 1950s and then leached into the groundwater. The source of this contamination was successfully removed from the ground in the 1990s. This well is equipped with an air-stripping column, which captures the remaining TCE, removing it from the water.

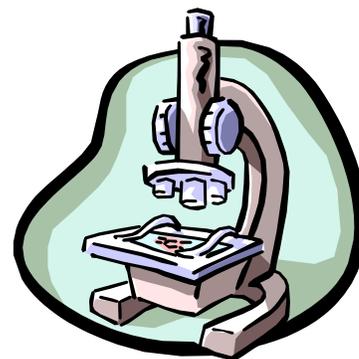
The depot established a wellhead protection program in December 1996. Wellhead protection zones help assess any potential problems that may affect water supply and identify delineated areas to ensure that measures are being taken to reduce the potential for production wells to become contaminated. Each of these zones is inspected monthly. One resulting action of initiating a wellhead protection program was the removal of all underground storage tanks within each zone.

A Source Water Assessment and Protection (SWAP) Plan is being developed jointly by Tobyhanna Army Depot and the Pennsylvania Department of Environmental Protection.

Pennsylvania State certified operators further ensure the quality of the water provided by managing the system seven days a week and providing on-the-spot operation and maintenance of all system components.

Monitoring of Your Drinking Water

Our water system uses only EPA-approved laboratory methods to analyze your drinking water. Water samples are taken from the distribution system and taps by trained/certified personnel; samples are then taken to a state-accredited laboratory where a full spectrum of water quality analyses is performed.



Our water system monitors for the substances listed in Column 1 of the following table using EPA-approved methods. Column 2 of the table specifies the monitoring frequency.

Analyte Groups and Monitoring Frequency Table

Analyte/Contaminant Group	Monitoring Frequency
Biological contaminants (total coliform group) ¹	Once per month (5-8 samples/month)
Lead and copper	Once yearly
Inorganic contaminants (IOCs) ²	Once every 3 years
Unregulated contaminants ³	Once every 5 years
Volatile Organic Compounds (VOCs) ⁴	Once every 3 years

1 Contaminants in this group include total coliform, fecal coliform and heterotrophic bacteria

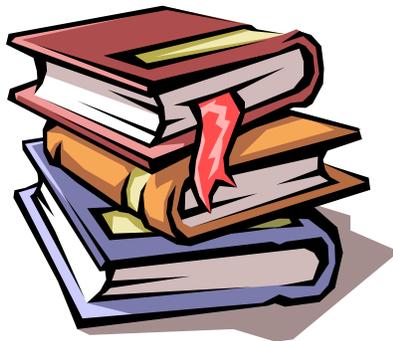
2 Contaminants in this group include metals, nitrate, fluoride and asbestos

3 Contaminants in this group include such compounds as chloroform, naphthalene, and sulfate

4 Contaminants in this group include such compounds as benzene, carbon tetrachloride, and trichloroethylene (TCE)

Definitions of Key Terms

To gain a better understanding of the content of this report, several key terms must be defined. They 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.

As required by EPA, our water system analyzes for contaminants (including lead and copper), which are governed by action levels (ALs), and not MCLs. Additionally, our water system analyzes for contaminants which are subject to treatment techniques. Therefore, the following definitions of these terms are provided below:

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

Additional Acronyms/Terms Used In This Report

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

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
pCi/L	Picocuries per liter; a measure of radioactivity in water
ug/L	Micrograms per liter; a unit of measure equivalent to part per billion (ppb)
mg/L	Milligrams per liter; a unit of measure equivalent to part per million (ppm)
CCR	Consumer Confidence Report
SDWA	Safe Drinking Water Act; Federal law which sets forth drinking water regulations
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.

Results Table. Detected Contaminants

The following table presents the analytical results of our monitoring for the reporting period of 2003. The sample results for this year will be presented in next year's 2004 Consumer Confidence Report.

Contaminant	MCLG (Ideal Goals)	MCL (Highest Level Allowed)	Highest Level Detected	Units of Measure	Range of Detection	Exceeded Standard	Likely Source of Contaminant
Nitrate	10	10	1.96	ppm	0 – 1.96	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Copper	0	AL = 1.3	0.400*	ppm	0.100 – 0.500	No	Corrosion of household plumbing systems.
Sulfates		250	11.10	ppm	2.09 – 11.10	No	
Lead	0	AL = 15	5.8*	ppb	5.0 – 7.2	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Fluoride	4	4	0.97	ppm	0.97 – 0.97	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Total Trihalomethanes	N/A	80	2.6	ppb	2.6 – 2.6	No	By-product of drinking water chlorination.
Radium-226	0	5	0.6	pCi/l	0.6 +/-0.4	No	Erosion of natural deposits.
Radium-228	0	5	0	pCi/l	0 +/-0.7	No	Erosion of natural deposits.

* This value represents the 90th percentile value of the most recent round of sampling.

Detected Contaminants

The "Likely Source of Contaminant" listed in the table above simply shows potential sources of the substance. This does not necessarily represent why it was detected in the TYAD water system. However, it should be noted that no level exceeded the allowed standard.

We constantly monitor the water supply to meet all regulatory requirements. The table lists only those contaminants that had some level of detection. Samples were taken for many other parameters and were not detected.

Public Involvement

This Consumer Confidence Report was prepared by Mr. Thomas J. Wildoner Jr. of the Environmental Management Division in coordination with Mr. Randy Didier, Chief, Environmental Management Division. For additional information regarding this report, please contact Mr. Wildoner at 570-895-6498, or via email at thomas.wildoner@tobyhanna.army.mil. We welcome public comments and participation.

Drinking Water Security

Report Suspicious Activity

...watch out!

...help out!

...report it!

We're all in this together.

FOR EMERGENCIES: Call 911

FOR MORE INFORMATION: Tom Wildoner, X56498