The finished water still pregrate for the finished water is till pregrate in Clearwells, will pregrate from the work of the reservoirs, before being released to the distribution system and Meriden residents. sand removes particles still present in the water. The clarified water then flows through Rapid Sand Filters. The of the tank and disposed of. from the bottom are removed flocs (now called "Residuals") ont of the top of the process, flocs sink to the bottom of a settling tank and clarified water flows prairie flows into the flows into the Rapid Mix Tank, where water treatment chemicals are added snd mixed thoroughly. The settled Sedimentation At the In the Flocculation Tanks, a gentle mixing motion forces tiny particles in the water to adhere to each other in clusters or "flocs." treatment plant. s reansported to the water How we treat your reservoir water

Routine maintenance such as water main flushing is

through maintenance and capital improvement projects. hance both the quality and taste of your water. We do this A-The Meriden Water Division is constantly trying to en-

CHESHIBE

Evansville Wells

Conn. Kegional Water Authority

Merimere — 9TW

Hubbard ——

SOUTHINGTON

WALLINGFORD

Meriden 5q. Mall Mule

elmere WTP

BEBLIN

 $\mathcal{L}^{-\text{What}}$ is being done to improve the system?

.səniləqiq network of underground nesses through a vast to city homes and busitreated, it is distributed field. After water is at each individual well from each well is treated treatment plants. Water of Meriden's four water ervoirs is treated at one ity. Water from the res-Regional Water Author-Central Connecticut water from the South the City also purchases system requirements, the City. Depending on wells located throughout and six groundwater east corner of Meriden,

Broad Brook Reservoir on the Meriden-Cheshire town clude four reservoirs on the Meriden-Berlin town line, the sources is shown on the map below. These sources insion actually has several different sources. Each of these -Water supplied to you from the Meriden Water Divi-

Reservoir in the northline, the Bradley-Hubbard

——Where does my water come from?

Questions Answers Your Drinking Water Meriden Water Division

limits set by state and federal regulation. tooth decay. Levels of fluoride are consistently within A-Fluoride is added to your water to help prevent Q-Does our water contain fluoride?

than six hours.

seconds) if it has been standing in the pipes for more tap water, run the water until it is cold (about 30 to 60 that contain lead. To minimize exposure to lead in your fixtures. Older homes are more likely to have fixtures that lead can leach from common household plumbing Even though we use a corrosion inhibitor, it is possible

provide the safest drinking water possible. sion control. The addition of this chemical helps to were consistently within the range desired for corro-Regularly monitored levels of the corrosion inhibitor lead and copper corrosion in the distribution system. phate-based corrosion inhibitor that aids in reducing plants. The Meriden Water Division adds a phos-

water at our treatment tests we run on finished detected in the frequent A-Lead has not been lead in my water? Q-Could there be

concerns.

sons change. Taste and odor changes do not pose any health notice the different tastes and odors as the sources and seabased on the need and time of the year, certain customers will during the summer. Because Meriden utilizes different sources taste and odor compounds in water sources are more common of the year and will vary due to different sources. Typically, $\mathsf{A}^{-\mathsf{W}}$ water naturally varies in taste and odor at different times Z-Why does the taste and odor of my water vary?

MAHAU

MIDDLETOWN

Platt-Lincoln Wells

projects to improve our infrastructure and storage systems. brove the water. We continue to undertake capital improvement cumulate over time. Capital improvement projects also can imperformed to clean the pipes of iron and other deposits that ac-

Together We Can Safeguard Our Water Supply

The Water Division is constantly checking water quality

Through the federal Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) sets national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove those substances. The Meriden Water Division continually monitors for these substances, using sophisticated equipment and advanced procedures.

The public has a part to play too

The SDWA requires that we provide you with detailed information on water quality each year. We are happy to do this, because customers who are informed are our best allies in supporting improvements necessary for the long-term health of our water system. And remember – our City Council meetings are open to the public. You are always welcome to attend and to voice your views on our drinking water. For information on meeting times and location, please contact the City Clerk at (203) 630-4030. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

Water Conservation Tips

Conservation is an important first step in preserving our water supply. Using these measures can also save you money by reducing your water and sewer bills. Here are a few suggestions.

Conservation measures you can use inside your home:

- Fix leaking faucets, pipes, and toilets.
- Install water-saving devices in faucets, toilets and appliances.
- Replace high-water-use fixtures.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- · Water the lawn and garden in the early morning or
- · Use mulch around plants and shrubs.
- · Repair leaks in faucets and hoses.
- · Use water-saving nozzles and sprinkler heads.
- Use water from a bucket to wash your car and save the hose for rinsing.



2007 Annual Water **Quality Report**

In 2007, water supplied by the Meriden Water Division met or surpassed all federal and state standards. See inside for the results of our tests on a wide range of contaminants.

This annual "consumer confidence report" also

What's In My Water? - Meriden Water-Quality Analysis

Contaminant	Date Tested	Unit	MCL	MCLG	Maximum Detected Level	Range Detected	Major Sources Vio	lation
Inorganic Contaminants								
Copper	2007	mg/l	AL=1.3	1.3	0.024	0.001-0.024	Corrosion of household plumbing systems; erosion of natural deposits	No
Fluoride	2007	mg/l	4.0	4.0	1.21	0.42-1.21	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	No
Nitrate	2007	mg/l	10	10	3.6	<0.05-3.6	Runoff from fertilizer use; leaching from septi tanks, sewage; erosion of natural deposits	c No
Barium	2007	mg/l	2	2	0.168	0.006-0.168	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Chlorine	2007	mg/l	4	4	2.3	0.05-2.3	Water additive used to control microbes	No
Sodium	2007	mg/l	AL = 28 (1)	NR	137	4.21-137	Stormwater runoff containing road salt	No (1)
Antimony	2007	mg/l	0.006	0.006	0.004	<0.003-0.004	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	No
Iron	2007	mg/l	NR	0.3 (2)	0.012	0-0.012	Naturally occurring	No
Manganese	2007	mg/l	NR	0.05(2)	0.476	0-0.476	Naturally occurring	No
Sulfate	2007	mg/l	NR	250 (2)	40	6.6-40	Naturally occurring	No
Chloride	2007	mg/l	NR	250 (2)	190	4.2-190	Water additive used to control microbes	No
Asbestos	2000 (3)	mfl	7	7	0.53	ND - 0.53	Decay of asbestos cement in water mains; erosion of natural deposits	No
Radioactive Contaminants								
Alpha emitters	2005 (4)	pci/l	15	0	6.8	ND - 6.8	Erosion of natural deposits of certain mineral that are radioactive and may emit a form of radiation known as alpha radiation	s No
Radium (combined)	2005 (4)	pci/l	5	0	1.3	ND – 1.3	Erosion of natural deposits	No
Uranium	2005 (4)	pci/l	30	0	3.5	ND - 3.5	Erosion of natural deposits	No
Microorganisms								
Turbidity (point of entry)	2007	NTU % > 0.3 NTU	1 ⁽⁵⁾ 5% ⁽⁵⁾	NR NR	0.941 3.6%	0.03-0.941 0-3.6%	Soil Runoff	No
Volatile Organic Contamina	nts							
Total TTHM	2007	ug/l	80 (6)	NR	38	28-38	Byproduct of drinking water disinfection	No
Total HAAS	2007	ug/l	60 (6)	NR	32	20-32	Byproduct of drinking water disinfection	No
Tetrachloroethylene	2007	ug/l	5	0	1.8	<0.5-1.8	Discharge from factories and dry cleaners	No
Dibromochloromethane	2007	ug/l	NR	60	4.8	<0.5-4.8	Byproduct of drinking water disinfection	No
Bromodichloromethane	2007	ug/l	NR	0	9.8	<0.5-9.8	Byproduct of drinking water disinfection	No
Bromoform	2007	ug/l	NR	0	0.95	<0.5-0.95	Byproduct of drinking water disinfection	No
Chloroform	2007	ug/l	NR	70	28	<0.5-28	Byproduct of drinking water disinfection	No
Dichloroacetic acid	2007	ug/l	NR	0	21	<1.0-21	Byproduct of drinking water disinfection	No
Trichloroacetic acid	2007	ug/l	NR	20	24	<1.0-24	Byproduct of drinking water disinfection	No

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. Each year we analyze thousands of water samples for bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes, and synthetic organic contaminants. For your information, we have listed in the table on the left the substances that were detected in our drinking water during the year. Although all of the substances listed are under the Maximum Contaminant Level (MCL) set by U.S. EPA, we believe it is important that you know exactly what was detected and how much of the substance was present in the water.

Notes To Table

- (¹) Although sodium does not have a MCL, the State requires that the water supplier provide notification to customers of levels exceeding 28.0 ppm. Therefore, if levels of sodium were recorded from a supply source in your area you were previously provided notification of the event. Elevated levels of sodium encountered are believed to be caused by road salt.
- (2) The EPA has established these National Secondary Drinking Water Regulations (NSDWRs) for contaminants that may cause cosmetic or aesthetic effects in drinking water. These standards are recommendations, not requirements, but the City of Meriden strives to comply with them
- (3) Asbestos is not tested for every year; the most recent results available are given
- (4) Radioactive contaminants are not tested for every year; the most recent results available are given.
- (6) Turbidity: As of January 1, 2002, turbidity may never exceed 1 NTU, and must not exceed 0.3 NTU in 95% of daily samples in any month
- (6) As of January 1, 2002, these standards refer to running annual averages. Data from the last three quarters of 2006 is included in figuring

Key To Table
AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
NTU = Nephelometric Turbidity Units
ND = non-detectable
NR= Not Regulated
mg/l = milligrams per liter
ug/l = parts per billion, or micrograms per liter
TT = Treatment Technique
pci/l = Picocuries per liter
mfl = Million fibers per liter
cfu/mL = bacterial colonies per milliliter

n/a = not applicable
TTHM = trihalomethanes
HAAS = haloacetic acids

Understanding Contaminants

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water from these sources travels over the surface of the land or through the ground, it can acquire naturally occurring minerals (which in some cases could be radioactive) and substances resulting from the presence of animals or from a wide variety of human and industrial activities. Substances that may be present in source water include:

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from such things as urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, or mining. This category of contaminants also includes the pesticides and herbicides used primarily in agriculture.

Radioactive Contaminants, which can be naturally occuring or may be the result of oil and gas production and mining activities.

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

Volatile Organic (and Synthetic) Contaminants, which are typically by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.

As the table above demonstrates, the Meriden Water Division removes these contaminants prior to distribution. Meriden water meets or surpasses all state and federal drinking water requirements.

Regulated Contaminants

Meriden Water Division tests for a large number of contaminants, though only detected contaminants are noted. Every regulated contaminant that we detected in the water is listed in the water-quality table above. In 2007, the Meriden Water Division's drinking water met or surpassed all federal and state drinking water standards.

Unregulated Contaminants

Meriden Water Division tested for Cryptosporidium in 2007 and the results are available as required.

The Meriden Water Division also utilizes a phosphate-based corrosion inhibior as part of a lead and copper control program. The Division regularly monitors orthophosphate total levels; during 2007, levels ranged from 0.7 mg/l to 1.74 mg/l.

Health Matters

he presence of contaminants in drinking water does not necessarily indicate that the water poses a potential health threat.

A few contaminants, like copper, are in fact essential nutrients at appropriate, very low concentrations. However, some people who drink water that contains copper in excess of the EPA's Action Level could experience gastrointestinal distress over a relatively short period of time. Over many years, ingesting water that contains copper in excess of the Action Level could lead to liver or kidney damage. People with Wilson's disease should consult their personal doctor about their water consumption.

Lead is also a concern. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water containing lead in excess of the action level over many years could develop kidney problems or high blood pressure.

Some people may be more vulnerable to contaminants in drinking water than is 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 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 are available from the Safe Drinking Water Hotline (800-426-4791).

Source Water Assessment

Source Water Assessment Reports were completed by the Department of Public Health, Drinking Water Division for the Meriden Water Division. The assessment report can be found on the DPH's website: http://www.dir.ct.gov/dph/Water/SWAP/community/CT0800011.pdf. The assessment found that the public drinking water sources have susceptibility to potential sources of contamination, low for the reservoir sources, and ranging from moderate to high for the groundwater sources.