

The Easton Suburban Water Authority (ESWA) is pleased to provide this Water Quality Report to meet Consumer Confidence Reporting requirements mandated by the Safe Drinking Water Act (SDWA). The purpose of this report is to provide all system customers with important information regarding the quality of their drinking water. The ESWA remains firmly committed to providing our customers with safe, high quality drinking water at all times. Miller Environmental, Inc. is the firm hired to manage the water treatment system for ESWA. Any questions regarding our operation may be directed to (610) 258-7181.

During the 2004 reporting year, ESWA conducted thousands of laboratory tests for drinking water contaminants. We are pleased to report that there were no contaminants detected above mandated regulatory limits. In addition to results of laboratory testing, this report also includes details regarding the source of our drinking water and how it compares to Environmental Protection Agency (EPA) and state standards. For more information about the drinking water, please call the Authority at (610) 258-7181 or fax (610) 258-7780.

**The Board of Directors
of the Easton Suburban
Water Authority meets
on the 2nd Monday of
each month at 3 p.m.
at the Authority
office located at
3700 Hartley Ave.,
Palmer Twp.,
Easton, PA.**

*Please feel free to attend and
participate in these meetings.*

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Easton Suburban Water Authority
3700 Hartley Ave.,
Easton, PA 18045

www.eswater.net

Water Quality Report 2004



LEGEND

AL	Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
MCL	Maximum Contaminant Level	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.
MCLG	Maximum Contaminant Level Goal	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.
NTU	Nephelometric Turbidity Units	A measure of water clarity.
pCi/l	picoruries per liter	A measure of radioactivity.
ppm	parts per million or milligrams per liter (mg/L)	One part per million equals about: one minute in two years or one inch in 16 miles
ppb	parts per billion or micrograms per liter (ug/L)	One part per billion equals about: one second in 32 years or one inch in 16,000 miles
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
MRDL	Maximum Residual Disinfectant Level	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Contaminants that may be present in some source water include:

Inorganic Contaminants — Salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas productions, mining or farming.

Organic Chemical Contamination — including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants — which can be naturally-occurring or 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 and wildlife.

Pesticides and Herbicides — which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Unregulated Contaminants:

The ESWA conducted monitoring for the List 1 and 2 Unregulated Contaminants as required by the EPA in 2004. No detections of any unregulated contaminant were made. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Volatile Organic Compounds:

Easton Water performed an annual test during 2004 for a total of 21 Volatile Organic Compounds. No Volatile Organic Compounds were detected in the treated water supply.

Disinfectants:

Chlorine	4 ppm	4 ppm	1.40 ppm	Water additive	Easton Water adds
	MRDLG	MRDL		used to control	chlorine for disinfection.
				microbes	Range = 1.0 - 1.4 ppm

Synthetic Organic Compounds:

Easton Water performed tests during the 2003-2005 compliance period for Synthetic Organic Compounds. No synthetic Organic Compounds were detected in the treated water supply. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Rule Violation:

On September 19, 2004, due to the heavy rains of Hurricane Ivan, one filter out of ten exceeded the maximum allowable turbidity level of 1.0 NTU for individual filter effluent in four consecutive readings. The range of readings was 1.08 NTU to 2.0 NTU and the total time of filter non-compliance was 30 minutes. None of the other nine filters exceeded the 1.0 NTU, but the combined filter effluent exceeded the maximum allowable level during the same period.

WHERE DOES YOUR WATER COME FROM?

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. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in drinking water provided by public water systems. However, the presence of some contaminants does not necessarily indicate 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.

The water source for the City of Easton surrounding service area is the Delaware River. The Easton Water Treatment Plant is a 10 MGD treatment facility originally built in 1932. Major improvements and plant upgrades were completed in 1981 and are continuing presently to meet new Surface Water Treatment Regulations that will come into effect in 2008.

Under Section 1453 of the U.S. Environmental Protection Agency's 1996 Safe Drinking Water Act, states must evaluate all drinking water sources that serve public systems and provide a mechanism for development of local protection programs. In accordance with the Pennsylvania Department of Environmental Protection's Source Water Assessment and Protection Program (SWAP), a source water assessment has been completed and the City of Easton's water treatment plant has been evaluated. The potential sources of contamination for this section of this surface water include both point and non-point sources of pollution. The Delaware River Basin Commission, USGS and USEPA are resources for information on levels of flow, water quality, and planning issues for the Delaware River and its basin. SWAP programs of both Pennsylvania and New Jersey affect the surface water source for the City of Easton. The complete assessment is available for public review at the regional DEP office. With proper credentials and purpose, anyone can request a file review of the report. Any questions regarding this program or assessment should be addressed to Joe Hebelka, DEP Central Office (717) 772-4014.

Inorganic Chemicals

	MCLG	MCL	Maximum Detected by Easton Water	Likely Source of Contaminant	Notes
Fluoride	4 ppm	2 ppm	1.79 ppm	Erosion of natural deposits; water additive which promotes strong teeth.	Easton Water adds fluoride to the treated water. Range = 0.00 - 1.79 ppm
Nitrate	10 ppm	10 ppm	0.60 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural products.	The analytical result was well below the levels of concern for Nitrate.
Copper	1.3 ppm	1.3 ppm (AL)	0.23 ppm (90th%)	Erosion of natural deposits.	For copper, zero (0) samples out of thirty (30) exceeded the AL. 0.270 ppm was the highest single value detected. Samples were analyzed in 2004 and are required every three years.
Lead	0 ppb	15 ppb (AL)	1 ppb (90th%)	Corrosion of household plumbing systems; Erosion of natural deposits.	For lead, there was one (1) sample out of thirty (30) that exceeded the AL. 18.9 ppb was the highest single value detected. Samples were analyzed in 2004, and are required every three years.

Turbidity

MCLG	MCL	Maximum Detected by Easton Water	Likely Source of Contaminant	Notes
0	TT= 1 NTU	6.0 NTU	Soil run off.	Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Samples are monitored continuously. The single highest value was 6.0 NTU NTU Range - 0.04 - 6.0 NTU
	TT = >=95% of monthly samples <0.3 NTU	99.91%		
	TT = 1 NTU	2.0 NTU	Violation	Individual filter turbidities not to exceed 1.0 NTU in two (2) consecutive readings at 15 minute intervals.

Disinfection By-Products

	MCLG	MCL	Maximum Detected by Easton Water	Likely Source of Contaminant	Notes
Total Trihalomethanes	N/A	80 ppb	58.4 ppb	By products of drinking water	Samples were taken quarterly during 2004, the results represent the highest detected quarter. No samples exceeded the MCL. THM Range =14.6 - 58.9 ppb HAAS Range = 9 - 30 ppb
Total Haloacetic Acids	N/A	60 ppb	25.9 ppb		

Radionuclides

	MCLG	MCL	Maximum Detected by Easton Water	Likely Source of Contaminant	Notes
Alpha Emitters	15 pCi/l	15 pCi/l	1.02 pCi/l	Erosion of natural deposits	Samples taken in the 2000-2004 monitoring period.
Combined Radium	5 pCi/l	5 pCi/l	0.30 pCi/l		

Microbiological Contaminants

	MCLG	MCL	Maximum Detected by Easton Water	Likely Source of Contaminant	Notes
Easton Water analyzes 30 samples/month. Regulation calls for reporting of the highest monthly number of positive samples for total coliform. No sample can test positive for fecal coliform or E. Coli bacteria.				Naturally present in the environment.	No samples tested positive for fecal or total coliform or E. Coli bacteria.
Total Organic Carbon (TOC)		TT = removal ratio >=1.0	1.22	Naturally present in the environment.	This is an average removal ratio for TOC. The Water Treatment Plant has to have a running annual average removal ratio of >=1.0. Range = .55-2.86

Additional Monitoring Performed by Easton Water

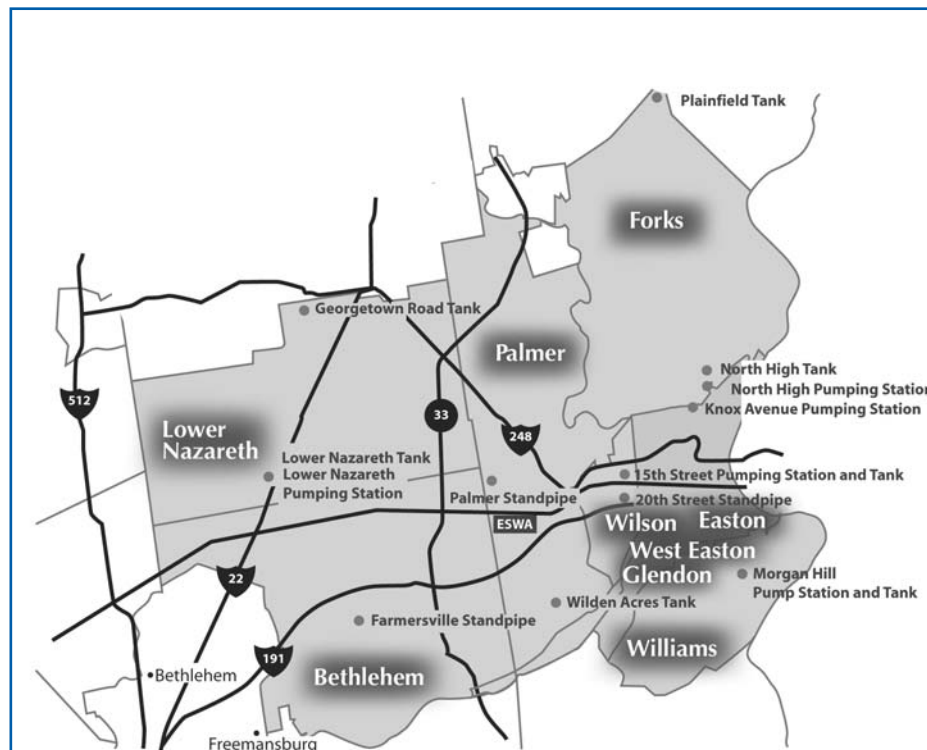
Parameter		Recommended Limits**	Maximum Detected By Easton Water	Notes
Chloride		250 ppm	23 ppm	**Secondary Drinking Water Standards refer to recommended limits on compounds that might pose a nuisance to the customer. These compounds affect aesthetic quality (appearance, taste and odor) but do not pose a health risk.
Color		15 Color Units	<5 Color Units	
Conosivity	Lower Range Upper Range	-1 Langelier Index +1 Langelier Index	-1.42	
Fluoride		2.0 ppm	0.7 ppm	
Foaming Agents	(ABS/LAS)	500 ppb	25 ppb	
Hardness	Lower Range Upper Range	50 ppm 250 ppm	56 ppm	
Iron		300 ppb	<5 ppb	
Manganese		50 ppb	8 ppb	
Odor		3 Threshold Odor Number (TON)	<1	
pH	Lower Range Upper Range	6.5 8.5	7.1	
Sulfate		250 ppm	21 ppm	
Total Dissolved Solids		500 ppm	110 ppm	
Zinc		5 ppm	0.46 ppm	

Special Warning:

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 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 (800) 426-4791.

Special Consideration Regarding Children, Pregnant Women, Nursing Mothers and Others:

Children may be more susceptible than adults to contaminants that may be present in drinking water due to lower body weight. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent to account for additional uncertainties regarding these effects. In cases of lead and nitrate concentrations, effects on infants and children are the health endpoints upon which the standards are based.



Easton Suburban Water Authority is committed to providing quality water and value-added services to our customers at an affordable rate. We will ensure our efforts by implementing sound business practices, maintaining a well trained professional workforce, utilizing advanced technologies and meeting the needs and choices of our customers.

If you have any questions or concerns about the quality of your water or the service we provide, please contact us at **610-258-7181**. You can also visit us online at **www.eswater.net**.

