

Unregulated Contaminants Table

CONTAMINANT	Average	Range	CONTAMINANT	Average	Range
1,1 - Dichloropropene	ND	0.000 - 0.000	Chloroform	ND	0.000 - 0.000
1,1,1,2-Tetrachloroethane	ND	0.000 - 0.000	Chloromethane	ND	0.000 - 0.000
1,1,2,2-Tetrachloroethane	ND	0.000 - 0.000	Dibromochloromethane	ND	0.000 - 0.000
1,1-Dichloroethane	ND	0.000 - 0.000	Dibromomethane	ND	0.000 - 0.000
1,2,3 - Trichlorobenzene	ND	0.000 - 0.000	Dicamba	ND in 2012	0.000 - 0.000
1,2,3 - Trichloropropane	ND	0.000 - 0.000	Dichlorodifluoromethane	ND	0.000 - 0.000
1,2,4 - Trimethylbenzene	ND	0.000 - 0.000	Dieldrin	ND in 2012	0.000 - 0.000
1,3 - Dichloropropane	ND	0.000 - 0.000	Hexachlorobutadiene	ND	0.000 - 0.000
1,3 - Dichloropropene	ND	0.000 - 0.000	Isopropylbenzene	ND	0.000 - 0.000
1,3,5 - Trimethylbenzene	ND	0.000 - 0.000	M-Dichlorobenzene	ND	0.000 - 0.000
2,2 - Dichloropropane	ND	0.000 - 0.000	Methomyl	ND in 2012	0.000 - 0.000
3-Hydroxycarboluran	ND in 2012	0.000 - 0.000	MTBE	ND	0.000 - 0.000
Aldicarb	ND in 2012	0.000 - 0.000	Metolachlor	ND in 2012	0.000 - 0.000
Aldicarb Sulfone	ND in 2012	0.000 - 0.000	Metribuzin	ND in 2012	0.000 - 0.000
Aldicarb Sulfoxide	ND in 2012	0.000 - 0.000	N - Butylbenzene	ND	0.000 - 0.000
Aldrin	ND in 2012	0.000 - 0.000	Naphthalene	ND	0.000 - 0.000
Bromobenzene	ND	0.000 - 0.000	N-Propylbenzene	ND	0.000 - 0.000
Bromochloromethane	ND	0.000 - 0.000	O-Chlorotoluene	ND	0.000 - 0.000
Bromodichloromethane	ND	0.000 - 0.000	P-Chlorotoluene	ND	0.000 - 0.000
Bromotorm	ND	0.000 - 0.000	P-Isopropyltoluene	ND	0.000 - 0.000
Bromomethane	ND	0.000 - 0.000	Propachlor	ND in 2012	0.000 - 0.000
Butachlor	ND in 2012	0.000 - 0.000	Sec - Butylbenzene	ND	0.000 - 0.000
Carbaryl	ND in 2012	0.000 - 0.000	Tert - Butylbenzene	ND	0.000 - 0.000
Chloroethane	ND	0.000 - 0.000	Trichlorofluoromethane	ND	0.000 - 0.000

**Bacteriological Contaminants:**

- (1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
  - (2) Fecal coliform (E.coli). Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
  - (3) Fecal Indicators. Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
  - (4) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
- Radiological Contaminants:**
- (5) Beta photon emitters. Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
  - (6) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
  - (7) Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
  - (8) Uranium. Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of cancer and kidney toxicity.
- Inorganic Contaminants:**
- (9) Antimony. Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
  - (10) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
  - (11) Asbestos. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
  - (12) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
  - (13) Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
  - (14) Bromate. Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
  - (15) Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
  - (16) Chloramines. Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort.
  - (17) Chlorine. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
  - (18) Chlorine dioxide. Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
  - (19) Chlorite. Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
  - (20) Chromium. Some people who use water containing chromium well in excess of the MCL

- over many years could experience allergic dermatitis.
  - (21) Copper. Copper is an essential nutrient, but, some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
  - (22) Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
  - (23) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
  - (24) Lead. 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 this water over many years could develop kidney problems or high blood pressure.
  - (25) Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
  - (26) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
  - (27) Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
  - (28) Total Nitrate and Nitrite. Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
  - (29) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
  - (30) Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
- Organic contaminants:**
- (31) Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
  - (32) Atrachlor. Some people who drink water containing atrachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
  - (33) Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
  - (34) Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
  - (35) Benz(a)pyrene [PAH]. Some people who drink water containing benz(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
  - (36) Carboluran. Some people who drink water containing carboluran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
  - (37) Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
  - (38) Chlordane. Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
  - (39) Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
  - (40) 2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

Table of Detected Contaminants in 2013

CONTAMINANT	VIOLATION Y/N	LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Turbidity	N	0.08-0.31	NTU	n/a	TT	Soil runoff
Chlorine	N	1.24-1.65	ppm	MRDLG=4	MRLD=4	Water Additive used to control microbes
Copper	N	0.02-0.22	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	0.002-0.005	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	0.52-0.85	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Total Nitrate and Nitrite	N	0.52-0.85	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Di(2-ethylhexyl) phthalate	N	0.00065	ppb	0	6	Discharge from rubber and chemical factories
HAAs (Haloacetic acids) (LRAA)	N	11-49	ppb	0	60	By-product of drinking water chlorination
TTHM (Total trihalomethanes) (LRAA)**	Y	35-84	ppb	0	80	By-product of drinking water chlorination

In accordance with regulations, 30 lead and copper samples were taken in the distribution system in 2013. The 90th percentile values were 0.002-0.005 ppm for lead and 0.02-0.22 ppm for copper.

\*\*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the first quarter of January 2013, we did not monitor during the required time period for Disinfection Byproducts, and therefore cannot be sure of the quality of your drinking water during that time. The sample was taken 5 days early causing a monitoring violation.

- (41) Dalapon. Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
- (42) Dibromochloropropane (DBCP). Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
- (43) o-Dichlorobenzene. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
- (44) p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
- (45) 1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
- (46) 1,1-Dichloroethylene. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
- (47) cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
- (48) trans-1,2-Dichloroethylene. Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
- (49) Dichloromethane. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
- (50) 1,2-Dichloropropane. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
- (51) Di (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.
- (52) Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
- (53) Dimoseb. Some people who drink water containing dimoseb well in excess of the MCL over many years could experience reproductive difficulties.
- (54) Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
- (55) Diquat. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
- (56) Endothal. Some people who drink water containing endothal in excess of the MCL over many years could experience problems with their stomach or intestines.
- (57) Endrin. Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
- (58) Epichlorohydrin. Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.
- (59) Ethylbenzene. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
- (60) Ethylene dibromide. Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
- (61) Glyphosate. Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
- (62) Haloacetic Acids (HAA). Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
- (63) Heptachlor. Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
- (64) Heptachlor epoxide. Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
- (65) Hexachlorobenzene. Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
- (66) Hexachlorocyclopentadiene. Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
- (67) Lindane. Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
- (68) Methoxychlor. Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
- (69) Oxamyl [Vydate]. Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
- (70) Pentachlorophenol. Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
- (71) Picoram. Some people who drink water containing picoram in excess of the MCL over many years could experience problems with their liver.
- (72) PCBs [Polychlorinated biphenyls]. Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
- (73) Simazine. Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
- (74) Styrene. Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
- (75) tetrachloroethylene. Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
- (76) Toluene. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
- (77) Total Organic Carbon. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increase risk of getting cancer.
- (78) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
- (79) Toxaphene. Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
- (80) 245-TP (Silver). Some people who drink water containing silver in excess of the MCL over many years could experience liver problems.
- (81) 1,2,4-Trichlorobenzene. Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
- (82) 1,1,1-Trichloroethane. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
- (83) 1,1,2-Trichloroethane. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
- (84) Trichloroethylene. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
- (85) Vinyl Chloride. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
- (86) Xylenes. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

# 2013 Annual Drinking Water Quality Report

# Pelham Water WORKS

P.O. Box 1479  
Pelham, AL 35124 | 205.620.6420

# Annual Drinking Water Quality Report

## PELHAM WATER WORKS

We are very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is wells that draw from Copper Ridge Dolomite and Longview Limestone Aquifers. We treat our water by adding chlorine at each well. Pelham Water Works has completed its Source Water Assessment Program as required by the Alabama Department of Environmental Management and a copy is available for viewing at the water works office.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact the City of Pelham's Public Works Director, Mr. Eddy Jowers at Pelham Water Works, 205-620-6413. We want our valued customers to be informed about their water utility. If you want to attend any of our regularly scheduled City Council Meetings, they are on the 1st and 3rd Monday of each month. Mayor Gary W. Waters is the Superintendent of the Water Works and the City Council members serve as the Water Board. The Council Members include Rick Hayes, Ron Scott, Beth McMillan, Maurice Mercer and Karyl Rice.

Pelham Water Works routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st of 2013, unless otherwise noted. Certain contaminants are monitored less frequently than annually. The data presented is from the most recent testing done in accordance with applicable regulations. However, if the data is more than five years old it is not a requirement to be included.

Based on a study conducted by ADEM with the approval of EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for any of these contaminants was not required.

### DEFINITIONS

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.

**Not Tested (NT)** - no testing was required during this monitoring period.

**Parts per million (ppm)** or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb)** or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt)** or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq)** or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Action Level** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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.

**Maximum Contaminant Level Goal** - The "Goal" (MCLG) is 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 Residual Disinfectant Level Goal or MRDLG** - 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 contaminants.

**Maximum Residual Disinfectant Level or MRDL** - 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.

**RAA** - Running annual average.

**LRAA** - Locational running annual average.

### WHAT DOES THIS INFORMATION MEAN?

As you can see by the Table of Detected Contaminants, the only violation was for a Disinfection Byproduct, TTHM. Due to the sampling error in the 1st quarter the running annual average level was above the regulatory limit for the 3rd and 4th quarters.

The location of the violation was 205 Oak Forest Drive. By amending our flushing program in the affected area the results returned to normal and are below the regulatory limit.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All 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 the 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 1-800-426-4791.

The 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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials of components associated with service lines and home plumbing. Pelham Water Works is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

We at Pelham Water Works work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Bacteriological Contaminants</b>						
1. Total Coliform Bacteria	N	ND		MCLG=0 MCL-presence of coliform bacteria in <=5% of monthly samples, or if a routine sample and a follow up repeat sample are total coliform positive and one is also fecal coliform or E. coli positive		Naturally present in the environment
2. Fecal coliform and E.coli	N	ND				Human and animal fecal waste
3. Fecal Indicators (enterococci or coliphage)	N	ND		None	TT	Human and animal fecal waste
4. Turbidity	N	0.08-0.31	NTU	n/a	TT	Soil runoff
<b>Radiological</b>						
5. Beta/alpha emitters	N	ND in 2004	mrem/yr	0	4	Decay of natural and man-made deposits
6. Alpha emitters	N	2.2 in 2011	pCi/L	0	15	Erosion of natural deposits
7. Combined radium 226/228	N	<0.6-1.4 in 2011	pCi/L	0	5	Erosion of natural deposits
8. Uranium	N	NT	ppb	0	30	Soil runoff
<b>Inorganic Chemicals</b>						
9. Antimony	N	ND in 2012	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
10. Arsenic	N	ND in 2012	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
11. Asbestos	N	ND in 2006	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
12. Barium	N	0.52-0.64 in 2012	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Beryllium	N	ND in 2012	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
14. Bromate	N	NT	ppb	0	10	By-product of drinking water chlorination
15. Cadmium	N	ND in 2012	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
16. Chloramines	N	NT	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
17. Chlorine	N	1.24-1.65	ppm	MRDLG=4	MRDL=4	Water Additive used to control microbes
18. Chlorine Dioxide	N	NT	ppb	MRDLG=800	MRDL=800	Water additive used to control microbes
19. Chlorite	N	NT		800 ppb	1 ppm	By-product of drinking water chlorination
20. Chromium	N	ND in 2012	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
21. Copper	N	0.02-0.22	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
22. Cyanide	N	ND in 2012	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
23. Fluoride	N	ND in 2012	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
24. Lead	N	0.002-0.005	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
25. Mercury (inorganic)	N	ND in 2012	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
26. Nitrate (as Nitrogen)	N	0.52-0.85	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
27. Nitrite (as Nitrogen)	N	ND	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
28. Total Nitrate and Nitrite	N	0.52-0.85	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
29. Selenium	N	ND in 2012	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
30. Thallium	N	ND in 2012	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Organic Chemicals</b>						
31. Acrylamide	N	ND in 2006		0	TT	Added to water during sewage/wastewater treatment
32. Atrazine	N	ND in 2012	ppb	0	2	Runoff from herbicide used on row crops
33. Atrazine	N	ND in 2012	ppb	3	3	Runoff from herbicide used on row crops
34. Benzene	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
35. Benzo(a)pyrene (PAH)	N	ND in 2012	ppt	0	200	Leaching from linings of water storage tanks and distribution lines
36. Carbofuran	N	ND in 2012	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
37. Carbon tetrachloride	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
38. Chlordane	N	ND in 2012	ppb	0	2	Residue of banned termiticide
39. Chlorobenzene	N	ND in 2006	ppb	100	100	Discharge from chemical and agricultural chemical factories
40. 2,4-D	N	ND in 2012	ppb	70	70	Runoff from herbicide used on row crops
41. Dalapon	N	ND in 2012	ppb	200	200	Runoff from herbicide used on rights of way
42. Dibromochloropropane	N	ND in 2012	ppt	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
43. o-Dichlorobenzene	N	ND	ppb	600	600	Discharge from industrial chemical factories
44. p-Dichlorobenzene	N	ND	ppb	75	75	Discharge from industrial chemical factories
45. 1,2-Dichloroethane	N	ND	ppb	0	5	Discharge from industrial chemical factories
46. 1,1-Dichloroethylene	N	ND	ppb	7	7	Discharge from industrial chemical factories
47. cis-1,2-Dichloroethylene	N	ND	ppb	70	70	Discharge from industrial chemical factories
48. trans-1,2-Dichloroethylene	N	ND	ppb	100	100	Discharge from industrial chemical factories
49. Dichloromethane	N	ND in 2007	ppb	0	5	Discharge from pharmaceutical and chemical factories
50. 1,2-Dichloropropane	N	ND	ppb	0	5	Discharge from industrial chemical factories
51. Di(2-ethylhexyl) adipate	N	ND	ppb	400	400	Discharge from chemical factories
52. Di(2-ethylhexyl) phthalate	N	0.00065	ppb	0	6	Discharge from rubber and chemical factories
53. Dinoseb	N	ND in 2012	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
54. Dioxin [2,3,7,8-TCDD]	N	ND in 2006	ppq	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
55. Diquat	N	ND in 2012	ppb	20	20	Runoff from herbicide use
56. Endothal	N	ND in 2012	ppb	100	100	Runoff from herbicide use
57. Endrin	N	ND in 2012	ppb	2	2	Residue of banned insecticide
58. Epichlorohydrin	N	ND in 2006	ppb	0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
59. Ethylbenzene	N	ND	ppb	700	700	Discharge from petroleum refineries
60. Ethylene dibromide	N	ND in 2012	ppt	0	50	Discharge from petroleum refineries
61. Glyphosate	N	ND in 2012	ppb	700	700	Runoff from herbicide use
62. HAA5 (Haloacetic Acids) (LRAA)	N	11-49	ppb	0	60	By-product of drinking water chlorination
63. Heptachlor	N	ND in 2012	ppt	0	400	Residue of banned termiticide
64. Heptachlor epoxide	N	ND	ppt	0	200	Breakdown of heptachlor
65. Hexachlorobenzene	N	ND in 2012	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
66. Hexachlorocyclopentadiene	N	ND in 2012	ppb	50	50	Discharge from chemical factories
67. Lindane	N	ND in 2012	ppt	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
68. Methoxychlor	N	ND in 2012	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
69. Oxamyl [Vydate]	N	ND in 2012	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
70. Pentachlorophenol	N	ND	ppb	0	1	Discharge from wood preserving factories
71. Picloram	N	ND in 2012	ppb	500	500	Herbicide runoff
72. PCBs [Polychlorinated biphenyls]	N	ND in 2012	ppt	0	500	Runoff from landfills; discharge of waste chemicals
73. Simazine	N	ND in 2012	ppb	4	4	Herbicide runoff
74. Styrene	N	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
75. Tetrachloroethylene	N	ND	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
76. Toluene	N	ND	ppm	1	1	Discharge from petroleum factories
77. Total Organic Carbon (TOC)	N	0.2-0.3 in 2012	ppm	n/a	TT	Naturally present in the environment
78. TTHM (Total trihalomethanes) (LRAA)	Y	35-64	ppb	0	80	By-product of drinking water chlorination
79. Toxaphene	N	ND in 2012	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
80. 2,4,5-TP (Silvex)	N	ND in 2012	ppb	50	50	Residue of banned herbicide
81. 1,2,4-Trichlorobenzene	N	ND	ppb	70	70	Discharge from textile-finishing factories
82. 1,1,1-Trichloroethane	N	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
83. 1,1,2-Trichloroethane	N	ND	ppb	3	5	Discharge from industrial chemical factories
84. Trichloroethylene	N	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
85. Vinyl Chloride	N	ND	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
86. Xylenes	N	ND	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories