

# 2012 Water Quality Report Ligonier Water Works

This letter explains the quality of drinking water provided by Ligonier Water Works. Included is a listing of results from water quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. We are proud to share our results with you. Please read them carefully.

We are proud to report that the water provided by Ligonier Water Works meets or exceeds established water quality standards. The water source Ligonier Water Works is supplied by groundwater pumped from two wells that are 200 feet deep located at approximately one mile north of the city limits. We have continued updating the controls of our water plant to ensure the quality of water being distributed to you. Over the years the Ligonier Water Works has successfully completed the planning and implementation stages of our Well Head Protection Program. We have signs indicating exactly where our area of protection is located. Important health information drinking water, excluding 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.

The sources of drinking water (both tap and bottled) 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 human activity. Contaminants that may be present in source water include: **Microbial Contaminants** such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural operation, and wildlife; **Inorganic Contaminants** such as salts and metals which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; **Pesticides and Herbicides** which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; **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 storm water runoff and septic systems; **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 which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide some protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemo-therapy, 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.

## How to Read the Water Quality Table

The results of the tests performed are the most recent, testing available and are presented in the table. Terms used in the Water Quality Table and in other parts of this report are defined here.

**Maximum Contaminants Level or MCL:** The highest level of contaminants that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal or MCLG:** The level of contaminant in drinking water below which there is no Known or expected risk to health. MCLG's allow for a margin of safety.

**Detected Level:** The highest level detected of a contaminant for comparison against the acceptance levels for each parameter.

**Action Level:** The concentration of a contaminant which, if exceeded < triggers treatment or other Requirements which a water system must follow. **Range:** The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.

Water Testing for Ligonier Water Works as of 6/3/2009		6/20/2012		
Test	Test Date	Detection Level	MCL	Result mg/L
Nitrate	10/4/2012	1.0	10.0	BDL
Nitrate	10/4/2012	1.0	10.0	BDL

Regulated Volatile Compounds				
Test	Test Date	Detection Level	MCL	Result mg/L
Benzene	10/11/2012	0.5	5	BDL
Carbon Tetrachloride	10/11/2012	0.5	5	BDL
Chlorobenzene	10/11/2012	0.5	100	BDL
1,2-Dichlorobenzene	10/11/2012	0.5	600	BDL
1,4-Dichlorobenzene	10/11/2012	0.5	75	BDL
1,2-Dichloroethane	10/11/2012	0.5	5	BDL
1,1-Dichloroethylene	10/11/2012	0.5	7	BDL
1,2-Dichloroethylene, cis	10/11/2012	0.1	70	BDL
1,2-Dichloroethylene, trans	10/11/2012	0.5	100	BDL
Dichloromethane	10/11/2012	0.5	5	BDL
1,2-Dichloropropane	10/11/2012	0.5	5	BDL
Ethylbenzene	10/11/2012	0.5	700	BDL
Styrene	10/11/2012	0.5	100	BDL
Tetrachloroethylene	10/11/2012	0.5	5	BDL
Toluene	10/11/2012	0.5	1000	BDL
1,2,4-Trichlorobenzene	10/11/2012	0.5	70	BDL
1,1,1-Trichloroethane	10/11/2012	0.5	200	BDL
1,1,2-trichloroethane	10/11/2012	0.5	5	BDL
Trichloroethylene	10/11/2012	0.5	5	BDL
Vinyl Chloride	10/11/2012	0.5	2	BDL
Total Xylenes	10/11/2012	0.5	10000	BDL

Regulated Inorganic Chemicals				
Test	Test Date	Detection Level	MCL	Result mg/L
Antimony	9/27/2012	0.001	0.006	BDL
Arsenic	9/27/2012	0.001	0.010	0.003
Barium	10/25/2012	0.014	2.0	0.138
Beryllium	10/2/2012	0.001	0.004	BDL
Cadmium	10/26/2012	0.001	0.005	BDL
Chromium	10/2/2012	0.005	0.1	BDL
Cyanide (Free)	10/8/2012	0.01	0.2	BDL
Fluoride (Adjusted)	5/5/2009	0.05	2	0.20
Mercury	10/7/2012	0.0002	0.002	BDL
Nickel	10/2/2012	0.01	0.1	0.011
Selenium	10/18/2012	0.001	0.05	BDL
Thallium	10/29/2013	0.001	0.002	BDL
Sodium	5/11/2013	1	No MCL	3.6

<b>Synthetic Organic Compounds</b>				
<b>Test</b>	<b>Test Date</b>	<b>Detection Level</b>	<b>MCL</b>	<b>Result mg/L</b>
Alachlor (Lasso)	6/16/2010	0.2	2	<0.2
Atrazine	6/16/2010	0.5	3	<0.5
Benzoapyrene	6/16/2010	0.1	0.2	<0.1
Carbofuran	6/22/2010	0.9	40	<0.9
Chlordane (Alpha & Gamma)	6/16/2010	0.2	2	<0.2
2,4-D	6/23/2010	1	70	<1
Dalapon	6/23/2010	5	200	<5
DBCP	6/15/2010	0.02	0.2	<0.02
Dinoseb	6/23/2010	1	7	<1
Diquat	6/25/2010	2	20	<2
Di (2-ethylhexyl) adipate	6/16/2010	0.6	400	<0.6
Di (2-ethylhexyl) phthalate	6/16/2010	0.6	6	<0.6
Endothall	6/15/2010	9	100	<9
Endrin	6/16/2010	0.1	0.2	<0.1
Ethylene Dibromide (EDB)	6/15/2010	10	50	<10
Glyphosate (Round-Up)	6/17/2010	30	700	<30
Heptachlor	6/16/2010	0.2	0.4	<0.2
Heptachlor Epoxide	6/16/2010	0.1	0.2	<0.1
Hexachlorobenzene	6/16/2010	0.1	1	<1
Hexachlorocyclopentadiene	6/16/2010	0.5	50	<0.5
Lindane	6/16/2010	0.1	0.2	<0.1
Methoxychlor	6/16/2010	0.1	40	<0.1
Oxamyl (Vydate)	6/22/2010	2	200	<2
Pentachlorophenol	6/23/2010	0.4	1	<0.4
Picloram (Tordon)	6/23/2010	1	500	<1
Simazine	6/16/2010	0.35	4	<0.35
2,4,5-TP (Silvex)	6/23/2010	1	50	<1
Toxaphene	6/16/2010	1	3	<1

<b>TTHM</b>				
<b>Test</b>	<b>Test Date</b>	<b>Detection Level</b>	<b>MCL</b>	<b>Result mg/L</b>
TTHM	9/27/2012	0.5		BDL

<b>HAA5</b>				
<b>Test</b>	<b>Test Date</b>	<b>Detection Level</b>	<b>MCL</b>	<b>Result mg/L</b>
HAA5	9/27/2012	1.0		BDL

Inorganic Contaminants	Date Tested	Units	MCLG	MCL	Range	Major Sources
Fluoride	2008	ppm	4	4	.45-1.4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	2008	ppm	10	10	1.5	Runoff from fertilizer use; Leaching from septic tanks; sewage
						Erosion of natural deposits.
Gross Beta	6/6/2003	pci/l	5	5	2.6	Decay of natural & man-made deposits of certain minerals that are radioactive & may emit from of radiation known as photons & beta radiation
Gross Alpha	6/6/2003	pci/l	5	5	1.8	Erosion of natural deposits of certain minerals that are radioactive & may emit
						a form of radiation known as alpha radiation .
Copper (1)	2011	ppm	1.3	AL=1.3	0.25	Corrosion of household plumbing system; erosion from natural deposits
						Leaching from wood preservatives.
Lead (2)	2011	ppm	0.015	0.015	0.001	Corrosion of household plumbing system; erosion of natural deposits.

#### Key to Table

AL=Action Level

ppm= Parts per Million

MCL= Maximum Contaminant Level

ppb= Parts per Billion

MCLG = Maximum Contaminant Level Goal

NA= Not Applicable

pci/l= Picocuries per Liter (a measure of radioactivity)

We encourage public interest and participation on our community's decisions affecting drinking water. Regular Board of Works meetings are held on the second and fourth Wednesday of each month in Council Chambers at 301 S. Cavin Street at 1:30 p.m. The public is welcome.

The Ligonier Water Works phone number:260-894-4241 and PWSID number: 52570 IO