2016 Annual Water Quality Report
Highland Sewer & Water Authority

Lloydell Well System **PWS ID #: 4110015**

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

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).

Water System Information

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact **Don Scott** at **814-266-3146 ex. 102**. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the first and third Tuesday of every month at the Authority office, 120 Tank Drive, Johnstown, Pa 15904.

Our Water Sources

- Groundwater Wells (Lloydell Wells #1 & #2) located in Adams Township, Cambria County.

Educational Information

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from 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 livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater run-off, 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 stormwater 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 stormwater runoff, and septic systems.
- Radioactivity 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 and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Containment Level Goal (MCLG) - The level of containment 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 (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.

Maximum Residual Disinfectant Level Goal (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.

Minimum Residual Disinfectant Level (MinRDL) – The minimum level of residual disinfectant required at the entry point to the distribution system.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (ug/L)

ppm= parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or pictograms per liter

ppt = parts per trillion, or nanograms per liter

A Source Water Assessment of our sources was completed in 2004 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our sources are potentially most susceptible to accidents and spills along the roadways within the assessment areas and non-point source contamination from residences, pesticide use and past mining practices. Overall, our sources have moderate risk of significant contamination. Summary reports of the Assessment are available by writing to Highland Sewer & Water Authority, 120 Tank Drive, Johnstown, Pa 15904 and will be available on the PADEP website at http://www.dep.state.pa.us (Keyword: "DEP source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP's Southwest Regional Office, Records Management Unit at 412-442-4000.

Monitoring Your Water

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2016. The State allows us to monitor for some contaminants less then once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

Detected Sample Results

ENTRY POINT DISINFECTANT RESIDUAL						
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Violation	Sources of Contamination
Chlorine	0.40 ppm	1.36 ppm	1.36 - 2.21 ppm	9/27/2016	No	Water additive used to control microbes

MICROBIAL					
Contaminant	MCL	MCLG	Highest # or % of positive Samples	Violation	Sources of Contamination
Total Coliform Bacteria	For systems that collect < 40 samples per month: More than 1 positive monthly sample	0	0	No	Naturally Present in the Environment
Fecal Coliform Bacteria or E. Coli	0	0	0	No	Human and animal fecal waste

CHEMICAL CONTAMINANT							
Chemical Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Sample Date	Violation	Sources of Contamination
Chlorine	MRDL = 4	MRDL = 4	1.39 ppm Highest Monthly Avg. (March/June/ November)	0.59 - 1.84 ppm	Daily	No	Water additive used to control microbes.
Barium	2	2	0.247 ppm	0.247 ppm	3/04/15	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate	10	10	0 ppm	0 ppm	5/04/16	No	Run-off from fertilizer use
Alpha Emitters	15	0	1 pCi/L	1 pCi/L	6/03/15	No	Erosion of natural deposits
Radium - 228	5	0	0.7 pCi/L	0.7 pCi/L	6/03/15	No	Erosion of natural deposits
Uranium	30	0	1.49 ug/L	1.49 ug/L	2009	No	Erosion of natural deposits
Haloacetic Acids (HAA5)	60	N/A	0 ppb	0 ppb	7/13/16	No	By-product of drinking water chlorination
Trihalomethanes (TTHM)	80	N/A	0 ppb	0 ppb	7/13/16	No	By-product of drinking water chlorination

LEAD and COPPER						
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	# of Sites Above AL of Total Sites	Violation	Sources of Contamination
Lead	15 ppb	0 ppb	0 ppb 6/10/16	0 out of 5	No	Corrosion of household plumbing
Copper	1.3 ppm	1.3 ppm	0.187 ppm 6/10/16	0 out of 5	No	Corrosion of household plumbing

Information About Lead

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 and components associated with service lines and home plumbing. Highland Sewer and Water Authority 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 your 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.

RAW SOURCE WATER MICROBIAL					
Contaminant	MCLG	Total # of Positive Samples	Dates	Violation	Sources of Contamination
E. Coli	0	0	2016	No	Human and animal fecal waste

Health Effects:

Barium - Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Nitrate - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Violations: DEP Received CCR Report late. Compliance Achieved.