

Annual
WATER
QUALITY
REPORT

Reporting Year 2012



Presented By
Highridge Water Authority

PWS ID#: 5650069

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 www.epa.gov/safewater/lead.

Water Sources of Highridge

The water system is currently supplied by a series of mountain reservoirs with a combined total raw water storage capacity of approximately 400 million gallons.

These reservoirs, amidst western Pennsylvania's Laurel Mountains, are located on Tubmill Creek south of New Florence, and on Big Springs Run and Little Sugar Run outside the borough of Seward.

Additional Sources of Water

Highridge purchases small volumes daily from Blairsville Municipal Authority (BMA) and occasionally trades water with Central Indiana County Water Authority (CICWA). BMA's source is located east of the village of Hillside on Chestnut Ridge in Derry Township. Yellow Creek is CICWA's source.

System Improvements

Restoration of a century-old dam in Westmoreland County near Seward was one of two major highlights of the 2012 construction season.

Improvements at the dam included a new drainage system, an intake tower, emergency spillway, and stabilization of the dam's downstream slope. The project, engineered by Gibson-Thomas Engineers of Latrobe and built by Thomas Construction of Grove City, cost \$2.9 million, coming in \$1 million under budget. Senator Don White helped secure a \$2.3 million H2O grant for the project. A low-interest loan from PENNVEST was obtained to pay the balance.

The second major undertaking involved the expansion of water service along Route 22 in Derry Township. Over 150 new customers in the Sundial area were added with the construction of 8.8 miles of waterlines, a pump station, and a 200,000-gallon storage tank. Township supervisors provided \$550,000 in Community Development Block Grant funding toward the \$2.8 million dollar project.

Since 1991, approximately \$29.5 million has been invested by Highridge Water Authority in infrastructure improvements. Of this total, \$8.9 million has come from grants, courtesy of state and federal government programs.

Local government leaders and state officials have worked closely with Highridge to address the public's demand for safe drinking water and the reliable service that a community water system can provide.

The population served by Highridge in Westmoreland, Indiana, and Cambria counties totals 11,369 people.



QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call George E. Sulkosky, Executive Director, at (724) 459-8033.

Call 811 Before You Dig

There is a special toll-free number for the Pennsylvania One Call System. It is 811, and all customers should call this number before they dig or excavate their yards.

The number 811 is part of a nationwide effort to streamline the call-before-you-dig system to avoid damaging underground utility lines. Damaged water lines can interrupt service to many people. An 811 call alerts participating utilities of your work plans.

The utilities will come and mark the approximate location days before digging.

Community Participation

Highridge Water Authority (HWA) encourages its customers to participate in our meetings, held on the 3rd Tuesday of each month at 6:30 p.m. in the Authority's conference room at 17 Maple Avenue in Blairsville.

New Website

Visit our website, www.highridgewater.org for additional information about H.W.A. Customers can sign up for service, pay a water bill, review the flushing schedule, find the latest news and updates regarding emergencies or projects, plus much more!

What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders, and on pets' water bowls is caused by the growth of the bacterium *Serratia marcescens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive. It generally is more of an issue during the humid months in the summer.

The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help to eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence.

Serratia cannot survive in chlorinated drinking water.

Illegal Fire Hydrant Use

The use of fire hydrants by anyone other than Highridge Water Authority employees or local fire departments is a misdemeanor of the third degree, subject to fines and punishable by up to a year in jail.

Keep in mind that all costs to produce water are passed on to customers. In addition, the improper use of hydrants can result in customers getting dirty water, and if hydrants are broken, fire personnel may be prevented from saving your home.

Please report any suspicious use of fire hydrants to Highridge immediately. If your tips lead to the prosecution of offenders, we will give you a cash reward or credit on your water bill! Please call (888) 557-4343 to report use during business hours or (800) 847-6637 after normal hours.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the 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 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 some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife; **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 may also come from gas stations, urban stormwater runoff, and septic systems; **Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Missed Reporting Requirement

In November 2012, we failed to report a chlorine monitoring result in the time frame required. Once we were notified, results were reported immediately. Despite this infraction, Highridge Water Authority had no water-quality violations.

Blairsville Municipal Authority

In October 2012, the Blairsville Municipal Authority failed to report several monitoring results in the time frame required. Despite being cited, they had no water-quality violations.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Highridge Water Authority		Blairsville Municipal Authority		Central Indiana County Water Authority		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Barium (ppm)	2012	2	2	0.04	0.04–0.04	0.037 ¹	0.037–0.037 ¹	0.051	0.051–0.051	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine [Distribution] (ppm)	2012	[4]	[4]	0.835	0.507–0.835	1.3	0.18–1.3	0.86	0.52–0.86	No	Water additive used to control microbes
Chlorine [Entry Point] ² (ppm)	2012	MinRDL=0.2	NA	0.6	0.6–1.5	0.3	0.3–1.55	0.57	0.57–1.2	No	Water additive used to control microbes
<i>Cryptosporidium</i> (Units)	2010	TT	0	0	0–0	NA	NA	NA	NA	No	Naturally present in the environment
Di(2-ethylhexyl) Phthalate (ppb)	2011	6	0	1.1	ND–4.4	NA	NA	NA	NA	No	Discharge from rubber and chemical factories
Fluoride (ppm)	2012	2	2	NA	NA	1	1–1	0.25	0.25–0.25	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] ³ (ppb)	2012	60	NA	42 ⁴	12–105	13	10–16	23	23–23	No	By-product of drinking water disinfection
Nitrate (ppm)	2012	10	10	4.65	ND–9.3	0.18	0.18–0.18	0.32	0.32–0.32	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] ³ (ppb)	2012	80	NA	39 ⁵	5–81	37	17–63	61.3	61.3–61.3	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2012	TT	NA	0.7	ND–0.9	0.5	ND–0.5	1	0.8–1	No	Naturally present in the environment
Turbidity (NTU)	2012	TT	NA	0.18	0.03–0.18	0.239	0.03–0.239	0.06	0.03–0.06	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Highridge Water Authority		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES		
Copper (ppm)	2010	1.3	1.3	0.12	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2010	15	0	0	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Highridge Water Authority		Blairsville Municipal Authority		Central Indiana County Water Authority		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Bromodichloromethane (ppm)	2012	0.00458	0.00135–0.00897	0.0058	0.0037–0.0078	0.0133	0.0133–0.0133	By-product of drinking water disinfection
Chlorodibromomethane (ppm)	2011	0.0003	ND–0.00119	0.00075 ⁶	ND–0.0013 ⁶	0.0045 ⁶	0.0045–0.0045 ⁶	By-product of drinking water disinfection
Chloroform (ppm)	2012	0.0349	0.00402–0.0737	0.0314	0.0133–0.0539	0.0435	0.0435–0.0435	By-product of drinking water disinfection
Nickel (ppm)	2012	0.0018	0.0018–0.0018	NA	NA	NA	NA	Naturally present in the environment

¹ Sampled in 2011.

² The amount-detected value for chlorine [entry point] represents the lowest level that was detected.

³ We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.

⁴ Despite one high reading, compliance is determined by the running annual average from quarterly sampling. The average in 2012 for Haloacetic Acids was 42 ppb, well below the maximum level of 60 ppb.

⁵ Despite one high reading, compliance is determined by the running annual average from quarterly sampling. The average in 2012 for TTHMs was 39, well below the maximum level of 80 ppb.

⁶ Sampled in 2012.

Definitions

AL (Action Level): The concentration of a contaminant that, 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.

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

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 contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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