Henderson Water Utility
Drinking Water Quality Report for 2005
Reporting data collected in 2004
South Water System

Water Board Commissioners

Jeanne Marie Gadient, Leo Peckenpaugh, George Jones, Laffoon (Chip) Williams, and Rodger Bird

We are Proud to report that the water provided by Henderson South Water Utility meets or exceeds all established water quality standards.

The following information explains how drinking water provided by Henderson Water Utility is of the highest quality available. Included is a listing of results from water quality tests, as well as an explanation of where our water comes from. We are proud to share our results with you. Please read them carefully.

From the Chairman of the Water Board:

Our drinking water is excellent in taste, quality, and value. Clean water and a good sewer system take team effort. Please know that our system needs to be improved to continue to give you quality service and product. We will need rates in place to pay for these needed improvements.

Keep your eyes and ears open to potential threats to our system and report them. You, our customers, are an integral part of helping to improve our water. Please visit our website at www.hkywater.org to see how to do your part.

It has been a high honor to work with and be a part of the Water Department Team. During my board tenure, we have been blessed to be served by good management and dedicated employees.

Please communicate your needs and concerns so we can continue to serve you well.

Jeanne Marie Gadient

Board Chairman

Customers' Right to Know Information

For information about contaminants and potential health effects, you may contact the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. Also, Henderson Water Utility wants to keep our customers informed. If you have any questions concerning this report, or about the Henderson Water Utility (HWU), please contact Lucy Fry: at (270) 826-2421 or visit our web site at www.hkywater.org. You may also attend one of our meetings on the Third Monday of every month at 4:30 PM, 111 Fifth Street in Henderson.

Water Sources

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 human activity. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. ***All drinking water, including bottled drinking water, may be reasonably 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 contaminates and potential health effects can be obtained by calling the EPA Safe drinking water Hotline (1-800-426-4791).***

Type and Location of Your Water Source

The source of your drinking water is the surface water from the Green River, located at approximately river mile marker 41.3 or 9000 Hwy 2096 in Robards, Kentucky. The area around your water source is mostly residential but also contains some industrial and agricultural activity. The final source water assessment for this system has been completed and is contained in the, Main office of Henderson Water Utility, Henderson County Water District, or at the Green River Area Development District office in Owensboro, Kentucky. Following is a summary of the system's susceptibility to contamination, which is a part of the completed Source Water Plan (SWAP). An analysis of the susceptibility of Henderson's Ohio River and Green River water supplies to contamination indicates that this susceptibility is generally moderate. However, there are a few areas of high concern. Potential contaminant sources of concern include bridges, waste generators or transporters, landfills, river ports, a railroad, row crop land coverage, urban and recreational grass coverage, and sewer lines.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply. Nitrate in drinking water at levels above 10ppm 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 because of rain fall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Total Coliforms

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow –up test are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by media (newspaper, television, or radio). To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Possible Health Risk

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people 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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

One in a Million

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

Definitions & Abbreviations

Maximum Contaminant Level Goal (MCLG) - 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 Contaminant Level (MCL) - 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.

N/A - not applicable.

Nephelometric Turbidity Unit (NTU) – measurement of the clarity of water. Turbidity more than 5 NTU is just noticeable to the average person.

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

Parts per Billion (ppb) - one part per billion corresponds with one minute in 2,000 years or a single penny in $10,000,000.

Parts per Million (ppm) – one part per million corresponds to one minute in two years or a single penny in $10,000.

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

Unregulated Contaminants - require monitoring, but no MCL has been set at this time.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking waster. 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.

Fluoride

Fluoride has been added to the drinking water for dental health purposes. The water system monitors the fluoride levels on a daily basis and sends out samples twice a month to an independent state certified lab for analysis.

We at Henderson Water Utility 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.

Final analysis for calendar year 2004

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation Y/N	Likely Source
Turbidity (NTU)	Less than 0.5 NTU 95% of samples each month	0.275	98.8%	N	Soil runoff

REGULATED CONTAMINANT TEST RESULTS

Contaminant [code] (units)	MCL	MCLG	Highest Detection	Range	Date of Sample	Violation	Likely Source of Contamination
TOC (ppm) measured as ppm, but reported as a ratio*	TT	N/A	1.36	0.87-1.36	4th Qtr 2004	N	Naturally present in the environment
Barium [1010] (ppm)	2	2	0.038	N/A	7-22-04	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	MRDL 4	MRDLG 4	2.01 (annual average)	1.27-2.23 (monthly range)	1st quarter 2004	N	Water additive used to control microbes
Ethylene dibromide [2946] (ppt)	50.00	50.00	0.20	ND-0.20	10-4-2004	N	Discharge from petroleum refineries
Fluoride [1025] (ppm)	4	4	1.30	0.93-1.30	12-2004	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) [1040] (ppm)	10	10	2.67	1.68-2.67	7-22-2004	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Atrazine [2050] (ppb)	3	3	.41	ND - 0.41	4-27-2004	N	Runoff from herbicide used on row crops
Di(2ethylhexyl)phthlate [2039] (ppb)	6	0	0.10	ND - 0.10	7-12-2004	N	Discharge from rubber and chemical factories
Simazine [2037] (ppb)	4	4	0.49	ND - 0.49	4-27-2004	N	Herbicide runoff
HAA5 [haloacetic acids] (ppb)	60	0	100	38-140	2nd Qtr. 2004	Y	By-product of drinking water chlorination
TTHM [total trihalomethanes] (ppb)	80	0	55	14-101	2nd Qtr. 2004	N	By-product of drinking water chlorination

UNREGULATED CONTAMINANTS TEST RESULTS

Contaminant [code]	Unit	Average	Range
Bromodichloromethane [2943]	ppb	6.4	5.0-8.5
Chloroform [2941]	ppb	19.3	11.0-29.0
Dibromochloromethane [2944]	ppb	1.4	1.3-1.6