Annual Drinking Water Quality Report

of the

Authority of the Borough of Charleroi

Report Year 2012

Este informe contiene information importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

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 Ms. Leigh Anne Dooley at (724) 483-3585. 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 on the Fourth Tuesday of each month at 4:00 PM at the Authority Offices, 3 McKean Ave, Charleroi.

SOURCE OF WATER: Monongahela River.

A **Source Water Assessment** of our source was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that the Monongahela River Intake is most susceptible to accidental spills along the transportation corridor and “wildcat” sewers dumping raw sewage directly to the river and to a lesser degree by industry and storm water runoff from developed areas. Overall, the Monongahela Watershed has a high risk of significant contamination. A summary i report of the Assessment is available on the **Source Water Assessment & Protection Web** page at (<http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/> defaulthtm). Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Southwest Regional Office, Records Management Unit at (412) 442-4000.

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).

: MONITORING YOUR WATER:

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| 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 31,2012. The State allows us to monitor for some contaminants less than 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.

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DEFINITIONS:

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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. 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 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.

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 ppb = parts per billion, or micrograms per liter radiation absorbed by the body) (jjg/L)

pCi/L = picocuries per liter (a measure of ppm = parts per million, or milligrams per liter radioactivity) (mg/L)

DETECTED SAMPLE RESULTS:

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| **Chemical Contaminants** |
| **Contaminant** | **MCLin****CCR****Units** | **MCLG** | **Level****.Detected** | **Range of Detections** | **Units** | **Sample****Date** | **Violation****Y/N** | **Sources of Contamination** |
| **Chlorine** | **MRDL****=4** | **MRDLG****=4** | **0.89** | **0.60-0.89** | **PPm** | **Monthly** | **N** | **Water Additive used to control microbes .** |
| **Nitrate** | **10** | **10** | **0.782** | **NA** | **ppm** | **10/8/12** | **N** | **Runoff from fertilizer use.** |
| **Haloacetic Acids (HAA5)** | **60** | **NA** | **• 18.6** | **9.4-55.2** | **ccr** | **Quarterly** | **N** | **By-product of drinking water chlorination** |
| **Total****Trihalomethanes****(TTHM)** | **80** | **NA** | **32.9** | **7.9-91.0** | **ccr** | **Quarterly** | **N** | **By-product of drinking water chlorination** |

Range represents the Highest and Lowest levels detected during a Monitoring year. Compliance is based on the Run­ning Annual Average (RAA) of all levels detected during that Monitoring year.

RAA for 2012: (HAA5-18.6) (TTHM-32.9)

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| **Entry Point Disinfectant Residual** |
| **Contaminant** | **Minimum****Disinfectant****Residual** | **Lowest****Level****Detected** | **Range of Detections** | **Units** | **Sample****Date** | **Violation****Y/N** | **Sources of Contam­ination** |
| **Chlorine** | **0.2** | **0.63** | **0.63-1.32** | **ppm** | **3/28/12** | **N** | **Water additive used to control microbes.** |

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| **Lead and Copper** |
| **Contaminant** | **Action****Level****(AL)** | **MCLG** | **90th****Percentile****Value** | **Units** | **# of Sites Above AL of Total Sites** | **Violation****Y/N** | **Sources of Contamination** |
| **Lead** | **15** | **0** | **2.5** | **PPb** | **0** | **N** | **Corrosion of household plumbing.** |
| **Copper** | **1.3** | **1.3** | **0.3** | **ppm** | **0** | **N** | **Corrosion of household plumbing.** |

Lead and Copper samples listed above were taken 6/1/2010 thru 9/30/2010. The next Monitoring period for Lead and Copper will begin 6/1/2013 thru 9/30/2013.

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| **Total Organic Carbon (TOC)** |
| **Contaminant** | **Range of % Removal Required** | **Range of percent removal achieved** | **Number of quarters out of compliance** | **Violation****Y/N** | **Sources of Contamination** |
| **TOC** | **35%** | **\*31.9-48.1** | **0** | **N** | **Naturally present in the environment.** |

\*TOC Requirement was not violated due to Alternative Compliance Criteria (ACC). ACC for TOC Removal: The Running Annual Average for TOC in treated water must be less than 2.0ppm. The Running Annual Average for Monitoring Year 2012 is 1.32ppm.

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| **Microbial** |
| **Contaminants** | **MCL** | **MCLG** | **Highest# or % of Positive Samples** | **Violation****Y/N** | **Sources of Con­tamination** |
| **Total Coliform Bacteria** | **For systems that collect <40 samples/month:****• More than 1 positive monthly sample For systems that collect £ 40 samples/month:****• 5% of monthly samples are positive** | **0** | **1** | **N** | **Naturally present in the environment.** |
| **Fecal Coliform Bacteria or £ coli** | **0** | **0** | **0** | **N** | **Human and animal fecal waste.** |

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| **Turbidity** |
| **Contaminant** | **MCL** | **MCLG** | **Level****Detected** | **Sample****Date** | **Violation Y/N** | **Source of Contamination** |
| **Turbidity** | **TT=1 NTU for a single measurement** | **0** | **0.621** | **8/10/12** | **N** | **Soil runoff.** |
| **TT= at least 95% of monthly samples<0.3 NTU** | **99.7%** | **8/10/12** | **N** |

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HEALTH EFFECTS:

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| **Total****Coliform****Bacteria** | **Conforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present.** |
| **Fecal coliform and £ coli** | **Fecal coliforms and £ 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 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.** |
| **Total****organic****carbon****(ppm)** | **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 increased risk of getting cancer.** |

**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. Authority of the Borough of Charleroi 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://mw.epa.gov/safewater/lead**](http://mw.epa.gov/safewater/lead)

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 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 stormwater runoff and residential uses.
* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 assure 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 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** (800-426-4791). crc 6/10/13

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