Water Treatment Plant
2007 Regulated Detected Contaminants Tables

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Inorganics								
Fluoride	2007	ppm	4	4	0.97	n/a	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Disinfectant Residuals and Disinfection By-Products – Monitoring in Distribution System								
Total Trihalomethanes (TTHM)	2007	ppb	n/a	80	14.5	7.00 – 19.00	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	2007	ppb	n/a	60	14.0	8.00 - 18.00	No	By-product of drinking water disinfection
Disinfectant (chlorine) Residual (ppm)	2007	ppm	MRDLG 4	MRDL 4	0.85	0.71 – 0.85	No	Water additive used to control microbes

2007 Turbidity – Monitored every 4 hours at Plant Finished Water Tap			
Highest Single Measurement Cannot exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation yes/no	Major Sources in Drinking Water
0.18 NTU	100%	No	Soil Runoff

Lead and Copper Monitoring at Customers' Tap								
Contaminant	Test Date	Units	Health Goal MCLG	Action Level AL	90th Percentile Value*	Number of Samples Over AL	Violation yes/no	Major Sources in Drinking Water
+Lead	2007	ppb	0	15	13	5	**No**	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2007	ppm	1.3	1.3	.072	0	**No**	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.
*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.								

Regulated Contaminant	Treatment Technique	Running Annual Average	Monthly Ratio Range	Violation Yes / No	Typical Source of Contaminant
Total Organic Carbon	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each month and because the level was low, there is no requirement for TOC removal.				Naturally present in the environment.

Special Monitoring and Unregulated Contaminant	Level Detected	Sample Date	Typical Source of Contaminant
Sodium (ppm)	11 ppm	2/26/2007	Erosion of natural deposits

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Key to Detected Contaminants Tables		
Symbol	Abbreviation for	Definition/Explanation
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which 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 contaminant in drinking water below which there is no known or expected risk to health. . MCLGs allow for a margin of safety."
MRDL	Maximum Residual Disinfectant Level	"Maximum residual disinfectant level" or "MRDL" means 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	"Maximum residual disinfectant level goal" or "MRDLG" means 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.
pCi/L	PicoCurie per Liter	Measurement of activity of radioactive contaminants in drinking water.
ppb	Parts per billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts per million (one in one million)	The ppm is equivalent to parts per million parts. Approximately one inch in 16 miles.
n/a	Not applicable	
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.

2007 Water Quality Report for Wyandotte Municipal Services

This report covers the Wyandotte Municipal Services Water Department drinking water quality for the calendar year 2007. This information is a snapshot of the quality of the water that we provided to you in 2007. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

- **Contaminants and their presence in water:** 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 health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (800-426-4791)**.

- **Vulnerability of sub-populations:** Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons 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 **EPA's Safe Drinking Water Hotline (800-426-4791)**.

- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from the Detroit River. The State performed an assessment of our source water in 2004 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from "very-low" to "high", based on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is highly susceptible. As water travels over the surface of the land or through the ground, it dissolves minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. A copy of this report is maintained at the Water Department please contact Bill Weirich at 734-324-7142 for more information.

- **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 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 and residential uses.
  - **Radioactive contaminants**, which are naturally occurring or are the result of oil and gas production and mining activities.
  - **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.
  - **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. The Wyandotte Water Department 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://www.epa.gov/safewater/lead.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which provide the same protection for public health.

We invite public participation in decisions that affect drinking water quality. One may participate at the regular Municipal Services Commission Meetings.

For more information about your water, or the contents of this report, contact Bill Weirich, Water Department Superintendent, at 734 324-7142 or E-mail questions to wweirich@wyan.org. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

Wyandotte Water Department's 2007 Projects:

There were 5,122 feet of water mains replaced.

Our service crews repaired 53 main breaks and restored the road surfaces associated with those main breaks. Calendar year 1998 was the highest year for main breaks with 86 repairs.

In Wyandotte's process for water filtration and purification, the chemical alum is used. This year an alum storage tank was added to the process. This tank allows for increased storage of the alum. At this same time we were able to computerize the alum system for remote control operation.

First Alert Monitoring Systems have been installed at several water plants along Detroit and St. Clair Rivers. This year Wyandotte became one of those locations. These First Alert Monitoring Systems have been installed to detect organic contaminants along these rivers.

Each and every May, the water department performs city wide water hydrant flushing. This process ensures the working condition of all city water hydrants for our fire department personnel.

One of our on going projects is our Automated Meter Reading (AMR) system. AMR will provide the ability to read electric and water meters through our city communication lines. This will eliminate the need for our meter readers to go house to house for those readings. This year there were 637 meters replaced for this system.

In a continuing effort to keep our equipment in satisfactory and reliable working condition, our small dump truck and back hoe equipment were replaced. This equipment is vital to our ability to quickly repair water mains and water service lines.

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TO: Wyandotte Residents