

## CITY OF GIBRALTAR

### 2010 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
<b>Inorganic Chemicals – Annual Monitoring at Plant Finished Water Tap</b>								
Fluoride	9/20/10	ppm	4	4	1.11	0.63-1.11	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	8/23//10	ppm	10	10	0.26	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	6/9/2008	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Disinfectant Residuals and Disinfection By-Products – Monitoring in Distribution System</b>								
Total Trihalomethanes (TTHM)	Feb-Nov 2010	ppb	n/a	80	22.6	8.0-33.4	no	By-product of drinking water chlorination.
Haloacetic Acids (HAA5)	Feb-Nov 2010	ppb	n/a	60	9.9	3.7-18.4	no	By-product of drinking water disinfection.
Disinfectant (Total Chlorine) Residual)	Jan-Dec 2010	ppm	MRDGL 4	MRDL 4	0.63	0.49-0.79	no	Water additive used to control microbes.

<b>2010 Turbidity – Monitored every 4 hours at Plant Finished Water Tap</b>			
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
0.26 NTU	100%	no	Soil Runoff
Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.			

<b>2010 Microbiological Contaminants – Monthly Monitoring in Distribution System</b>					
Contaminant	MCLG	MCL	Highest Number Detected	Violation yes/no	Major Sources in Drinking Water
Total Coliform bacteria	0	Presence of Coliform bacteria > 5% of monthly samples	In one month 0	NO	Naturally present in the environment.
E.coli or fecal coliform bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal or E.coli positive.	in entire year 0	NO	Human waste and animal fecal waste.

<b>2008 Lead and Copper Monitoring at Customers' Tap</b>								
Contaminant	Test Date	Units	Health Goal MCLG	Action Level AL	90 <sup>th</sup> Percentile Value*	Number of Samples Over AL	Violation yes/no	Major Sources in Drinking Water
Lead	2008	ppb	0	15	6 ppb	0	NO	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2008	ppm	1.3	1.3	0.06ppm	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 (ppm)	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.				Erosion of natural deposits

### 2010 Special Monitoring

Contaminant	MCLG	MCL	Level Detected	Source of Contamination
Sodium (ppm)	n/a	n/a	4.80	Erosion of natural deposits

\* Information and tables provided by Detroit Water and Sewerage Department (DWSD) ML

### 2009 UNREGULATED CONTAMINANT MONITORING

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. Beginning in July of 2008-April 2009, the Detroit Water and Sewerage Department (DWSD) began monitoring quarterly for unregulated contaminants under the Contaminant Monitoring Rule 2 (UCMR2.) All the UCMR2 contaminants monitored on List 1 and List 2 in 2008-2009 were undetected.

Key to Detected Contaminants Tables		
Symbol	Abbreviation for	Definition/Explanation
<b>MCLG</b>	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health.
<b>MCL</b>	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.
<b>MRDLG</b>	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.
<b>MRDL</b>	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.
<b>ppb</b>	Parts per billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
<b>ppm</b>	Parts per million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
<b>NTU</b>	Nephelometric Turbidity Units	Measures the cloudiness of water.
<b>TT</b>	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
<b>AL</b>	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>HAA5</b>	Haloacetic acids	HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and, trichloroacetic acids. Compliance is based on the total.
<b>TTHM</b>	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. Compliance is based on the total.
<b>pCi/l</b>	picocuries per liter	a measure of radioactivity
<b>n/a</b>	Not applicable	
<b>≤</b>	Greater than	

PLEASE BE ADVISED THAT AS OF MARCH 28, 2011 THIS REPORT WILL BE AVAILABLE ON THE CITY OF GIBRALTAR'S WEBSITE AT [http://www.cityofgibraltar.net/water\\_quality.htm](http://www.cityofgibraltar.net/water_quality.htm). THIS REPORT WILL NOT BE DELIVERED TO YOUR PLACE OF RESIDENCE. HOWEVER, YOU MAY PICK UP A COPY OF THIS REPORT AT THE CITY OF GIBRALTAR MUNICIPAL BUILDING OR THE GIL TALBERT COMMUNITY CENTER.

IF YOU HAVE ANY QUESTIONS ABOUT THIS REPORT, YOU CAN CONTACT:

**CITY OF GIBRALTAR  
WATER DEPARTMENT  
29450 MUNRO  
GIBRALTAR, MI 48173  
(734) 676-3952  
E-MAIL [mkibby@cityofgibraltar.net](mailto:mkibby@cityofgibraltar.net)**