

## 2010 WATER QUALITY DATA

NON-SECONDARY CONTAMINANTS TABLE							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Radiological Contaminates</b>							
Radium 226 + 228 or combined radium (pCi/L)	7/2008	N	0.6	N/A	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Arsenic (ppb)	7/2008	N	1.7	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Cyanide (ppb)	7/2008	N	9.0	N/A	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	7/2008	N	2.1	.51-2.1	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Lead (point of entry) (ppb)	7/2008	N	0.5	N/A	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing and solder
Nitrate (as Nitrogen) (ppm)	7/2010	N	0.35	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	7/2008	N	42	N/A	N/A	160	Salt water intrusion, leaching from soil


Stage 1 Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	1-12/2010	N	2.3*	1.7-3.3	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1-12/2010	N	52.9	36.5-161	N/A	MCL = 60	By-product of drinking water disinfection
**TTHM [Total trihalomethanes] (ppb)	1-12/2010	Y	190.25	104-536	N/A	MCL = 80	By-product of drinking water disinfection

\*Chloramine level calculated as Running Annual Average

The state of Florida requires the use of a disinfectant to minimize the possibility of bacterial contamination in the drinking water distribution system. Total Trihalomethanes (TTHMs) are by-products of the reaction of the chlorine disinfectant with the natural organic and inorganic matter in the water. The Maximum Contaminant Level (MCL) set by the Florida Department of Environmental Protection (FDEP) for TTHMs is 80 parts per billion (ppb). Third and Fourth Quarter test results indicated that the running annual average (RAA) for TTHMs was 190.25 ppb. A MCL violation exists. System operators have lowered the amount of chlorine being added to the minimum level required to meet USEPA's new disinfection rule and implemented several other procedural changes that have significantly reduced formation of TTHMs. The County has hired an independent engineering firm to re-evaluate all aspects of water treatment and to provide recommendations to the County for design and procedural changes to further reduce TTHMs. The Mims Water System will continue to monitor and report the TTHM results on a quarterly basis as long as the running annual average exceeds the MCL.

\*\*TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06/2008	N	0.14	N/A	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	06/2008	N	2.2	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits



**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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

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, though representative, are more than one year old.

### Definitions

In this table, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

**Action Level (AL)** – the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.

**Maximum Contaminant Level Goal or 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 or 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 Residual Disinfectant Level Goal or MRDLG** – the level of a drinking water disinfectant below which there are no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level or 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.

**Not Applicable (N/A)** – does not apply to this section.

**Parts per billion (ppb) or Micrograms per liter (µg/l)** – one part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/l)** – one part by weight of analyte to 1 million parts by weight of the water sample.

**Picocurie per liter (pCi/L)** – measure of the radioactivity in water.

### Questions?

This report shows our water quality results and what they mean. If you have any questions about this report or our water utility, please contact:

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The ultimate authority for decisions is with the Brevard County Board of County Commissioners. We encourage public interest and participation in decisions affecting our drinking water. The Board generally holds regular meetings at the Government Center in Viera on the first and third Tuesday of each month (except June). Meeting dates and times are subject to change. For the most up-to-date information, call (321)633-2001 during regular business hours.