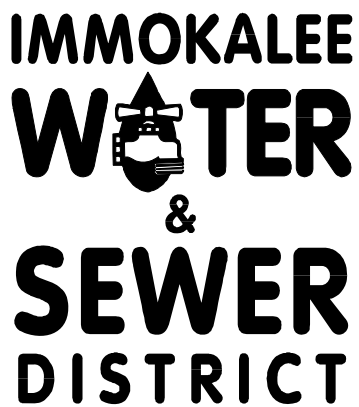


IMMOKALEE  
WATER & SEWER  
DISTRICT



2009 QUALITY  
ON TAP REPORT



## 2009 Quality on Tap Report

### Immokalee Water & Sewer District

*Este informe contiene información muy importante sobre su agua de beber. Por favor llame (239) 658-3630 para ayuda en traducir o entender este informe.*

*Document sa genyen anpil gro infomasyon sou afe dlo-a. Si ou manke compren li, rele nan numero sa-a (239) 658-3630.*

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water from wells. Our wells draw from the Lower Tamiami and Sandstone Aquifers. In 2009 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are seventeen potential sources of contamination identified for this system. These range from high to moderate susceptibility levels (underground fuel tanks), to low susceptibility levels, which include an injection well and wastewater plant. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp). Our water is treated with aeration for odor control, the pH is adjusted and it is disinfected using chlorine and ammonia. We also fluoridate the water for dental health purposes.

**This report shows our water quality results and what they mean.** If you have any questions about this report or concerning your water utility, please contact the Executive Director, Eva J. Deyo, or the Water Department Supervisor, Jerry Warden at (239) 658-3630.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 3<sup>rd</sup> Wednesday of each month at 3:30 p.m. in our Board Room, located at 1020 Sanitation Road, Immokalee.

Immokalee Water & Sewer District routinely monitors for contaminants in your drinking water according to Federal and State laws, rules and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period, of January 1<sup>st</sup> to December 31<sup>st</sup> 2009. Data obtained before January 1, 2009, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

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

**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 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 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.

**Maximum residual disinfectant level goal or 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.

**Initial Distribution System Evaluation (IDSE):** An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

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

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

“ND” means not detected and indicates that the substance was not found by laboratory analysis.

**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.

**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.

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

**EPA requires monitoring of over 80 drinking water contaminants.** Those contaminants listed in the table below are the only contaminants detected in your drinking water.

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. Immokalee Water and Sewer District 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>.

**NON-SECONDARY CONTAMINANTS TABLE**

<b>Microbiological Contaminants</b>	<b>Dates of sampling (mo./yr.)</b>	<b>MCL Violation Y/N</b>	<b>Highest Monthly Percentage /Number</b>	<b>MCLG</b>	<b>MCL</b>		<b>Likely Source of Contamination</b>
1. Total Coliform Bacteria	06/09	N	4.5%		For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% of monthly samples.		Naturally present in the environment
<p><i>Total Coliform: 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 tests 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 newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.</i></p>							
<p>IWSD had to send out public notices for failing to take enough bacteriological samples in August 2009. We were supposed to take 30 samples, and we only took 29. The District made up the missing sample in September 2009, but it was not taken in a timely manner.</p>							
<p>** Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.</p>							
<b>Contaminant and Unit of Measurement</b>	<b>Dates of sampling (mo./yr.)</b>	<b>MCL Violation Y/N</b>	<b>Level Detected**</b>	<b>Range of Results</b>	<b>MCLG</b>	<b>MCL</b>	<b>Likely Source of Contamination</b>
<b>Radiological Contaminants</b>							
5. Alpha emitters (pCi/l)	12/08 03/09 06/09 08/09	N	2.0	0-2.0	0	15	Erosion of natural deposits
6. Radium 226 + 228 or combined radium (pCi/L)	07/08	N	1.2	0-1.2	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
11. Barium (ppm)	07/08	N	.026	.016-.026	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Chromium (ppb)	07/08	N	8.8	5.6-8.8	100	100	Discharge from steel and pulp mills; erosion of natural deposits
15. Cyanide (ppb)	07/08	N	27.8	0-27.8	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories

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
16. Fluoride (ppm)	07/08	N	.75	.364 - .75	4	4	Erosion of natural deposits; water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm; discharge from fertilizer and aluminum factories
19. Nickel (ppb)	07/08	N	1.3	1.2-1.3	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
20. Nitrate (as Nitrogen) (ppm)	08/09	N	.15	0 - .15	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Selenium (ppb)	07/08	N	3.2	0-3.2	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
23. Sodium (ppm)	07/08	N	36.3	12.9-36.3	n/a	160	Salt water intrusion, leaching from soil

<b>TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters</b>							
For bromate, chloramines, or chlorine, the level detected is the the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.							
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
78. Chlorine (ppm)	Monthly	N	2.80	2.30 – 4.10	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
79. Haloacetic Acids (five) (HAA5) (ppb)	09/09	N	42.44	26.07-57.34	NA	MCL = 60	By-product of drinking water disinfection
80. TTHM [Total trihalomethanes] (ppb)	09/09	N	18.87	7.29-26.06	NA	MCL = 80	By-product of drinking water disinfection

In October 2005, the District changed the disinfection system to a combination of chlorine and ammonia, which has reduced the amounts of TTHMs and HAA5s in the system. Samples taken during 2009 indicate that the District is under the MCL on both contaminants, and the District was able to go to annual monitoring, on these parameters.

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>Lead and Copper (Tap Water)</b>							
77. Copper (tap water) (ppm)	07/09	N	.295	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
78. Lead (tap water) (ppb)	07/09	N	1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

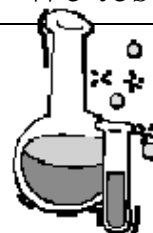
## SECONDARY CONTAMINANTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Secondary Contaminants</b>							
2. Chloride (ppm)	10/09	N	76.4	27.00-76.40		250	Natural occurrence from soil leaching
5. Fluoride (ppm)	03/08	N	.921	.662-.921		2.0	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
6. Iron (ppm) *TT	03/08	N	.512	.148-.512		0.3	Natural occurrence from soil leaching
8. Manganese (ppm) *TT	03/08	N	.356	.0112-.0356		0.05	Natural occurrence from soil leaching
12. Sulfate (ppm)	03/08	N	15.8	1.48-15.8		250	Natural occurrence from soil leaching
13. Total Dissolved Solids (ppm)	03/08	N	416	226-416		500	Natural occurrence from soil leaching

Note : \*TT: Treatment Technique – Pursuant to Rule 62-550.325(1), suppliers of water may use sequestering agents in lieu of meeting the MCL for iron and manganese when the maximum concentration of iron plus manganese does not exceed 1.0 milligrams per liter in water.

*Sometimes people complain about the color of the water. This is usually caused by iron in the water. This can occur in a home where little water is used or in a school after a weekend when there is no water used. This can be cleared up by running the water for a few minutes, until clear water comes out of the faucet.*

*We test for you!*



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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) 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.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) 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 stormwater runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) 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 at 1-800-426-4791.

MCLs 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 every day** at the MCL level for a *lifetime* to have a **one-in-a-million chance** of having the described health effect.

In our continuing efforts to maintain a safe and dependable water supply it will be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate

adjustments may be necessary in order to address these improvements.

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).

We at Immokalee Water & Sewer District would like for you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.

#### **Did you know?**

The Immokalee Water & Sewer District was created by an Act of the Florida Legislature on July 5, 1978, for the purpose of providing water and sewer services to Immokalee, an unincorporated area of Collier County, Florida. The District operates and maintains the water and sewer plants and systems as a Special District of the State of Florida. The District is governed by a seven member Board of Commissioners, appointed by the Governor of the State of Florida. The Board of Commissioners administers the District, independent from any other local governing body. The District currently employs 32 people.

#### **Board of Commissioners:**

- Fred N. Thomas, Jr. Chairman
- Sandra Freeman, Vice Chairman
- Richard Rice, Secretary
- Raymond Holland, Treasurer
- Everett Loukonen, Commissioner
- Veronica Barnhart, Commissioner
- Robert Halman, Commissioner

Board meetings are held the 3<sup>rd</sup> Wednesday of each month at 3:30 p.m.

Visit our website at [www.iw-sd.com](http://www.iw-sd.com) for more information about the Immokalee Water & Sewer District, or to download current or prior year "Quality on Tap" reports in English or Spanish.



**Immokalee Water & Sewer District**  
1020 Sanitation Road  
Immokalee, FL 34142

FIRST CLASS MAIL  
U.S. POSTAGE PAID  
2-0Z  
IMMOKALEE, FL 34142  
PERMIT NO 2