



## 2005 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. The Department of Environmental Protection has performed a Source Water Assessment on our system. These assessments were conducted to provide information about any potential sources of contamination in the vicinity of our wells. Potential sources of contamination identified include underground petroleum storage tanks, an injection well and a wastewater treatment 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 3:15 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> 2005. Data obtained before January 1, 2005, 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.

**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.

**NON-SECONDARY CONTAMINANTS TABLE**

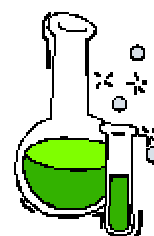
<b>Microbiological Contaminants</b>							
<b>Contaminant and Unit of Measurement</b>	<b>Dates of sampling (mo./yr.)</b>	<b>MCL Violation Y/N</b>	<b>Highest Monthly Percentage /Number</b>	<b>MCLG</b>	<b>MCL</b>	<b>Likely Source of Contamination</b>	
1. Total Coliform Bacteria	01/05	N	1	0	For systems collecting fewer than 40 samples per month: presence of coliform bacteria in 1 or more samples collected during a month.	Naturally present in the environment	
<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.</i>							
** 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.							
<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 (pCi/l)	12/03	N	6.79	0-6.79	0	15	Erosion of natural deposits
6. Radium 226 or combined radium (pCi/l)	12/03	N	1.67	1.29-1.92	0	5	Erosion of natural deposits

<b>Inorganic Contaminants</b>
-------------------------------

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
9. Arsenic (ppb)	11/05	N	1	0-1	N/A	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
11. Barium (ppm)	11/05	N	.037	.017-.037	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Chromium (ppb)	11/05	N	14	7-14	100	100	Discharge from steel and pulp mills; erosion of natural deposits
16. Fluoride (ppm)	11/05	N	.605	.408-.605	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
19. Nickel (ppb)	11/05	N	2	1-2	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
22. Selenium (ppb)	11/05	N	3	2-3	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
23. Sodium (ppm)	11/05	N	30.5	11.6-30.5	n/a	160	Salt water intrusion, leaching from soil
<b>Volatile Organic Contaminants</b>							
65. 1,2-Dichloropropane (ppb)	04/05	N	2.13	0-2.13	0	5	Discharge from industrial chemical factories

*Sometimes people complain about the color of the water. This is usually iron from a hot water pipe inside your home. 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!*



## TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters

- For the following parameters monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids, and/or TTHM (MCL 80 ppb). Range of Results is the range of results (lowest to highest) at the individual sampling sites.

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	2.40	.6-3.4	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
79. Haloacetic Acids (five) (HAA5) (ppb)	03/05 06/05 09/05 12/05	Y	53.08	6.69-70.72	NA	MCL = 60	By-product of drinking water disinfection
80. TTHM [Total trihalomethanes] (ppb)	01/05 06/05 09/05 12/05	Y	62.56	2.95-88.81	NA	MCL = 80	By-product of drinking water disinfection

In 2005 we had a maximum contaminant level violation for both TTHM and HAA5 as you can see in the chart above. 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. In addition, some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. In October 2005, the District changed the disinfection system to a combination of chlorine and ammonia, which reduced the amounts of TTHMs and HAA5s in the system. Samples taken during the last quarter of 2005 put the District's running average under the MCL on both contaminants.

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)	09/04	N	.71	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
78. Lead (tap water) (ppb)	09/04	N	4.9	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits
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>							
3. Color (color units)	10/05, 12/05	N	20	10-20		15	Naturally occurring organics
6. Iron (ppm) *TT	10/05 12/05	N	.886	.564-.886		0.3	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.

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.

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 25 people..

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

- Anne Goodnight, Chairman
- Fred N. Thomas, Jr., Vice Chairman
- Pete Cade, Secretary
- Shirley Sloan, Treasurer
- Terrie Aviles, Commissioner
- Raymond Holland, Commissioner
- Esmeralda Serrata, Commissioner

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