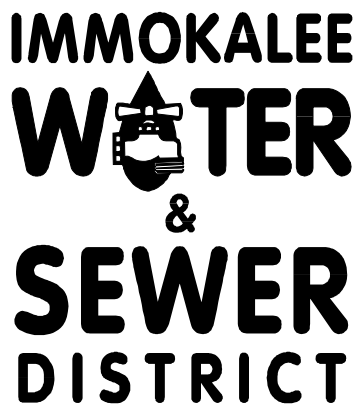


IMMOKALEE  
WATER & SEWER  
DISTRICT

A high-speed photograph of a single water droplet falling into a pool of water. The droplet is captured mid-fall, just above the point of impact. Below it, a series of concentric ripples spread outwards from the center. The background is a dark, uniform color, making the white water droplet and ripples stand out prominently.

2016 QUALITY  
ON TAP REPORT



# 2016 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 very pleased to present to you this year's Annual Water Quality Report. We want to keep you informed about the quality water and services that we have delivered to you over the past year. Our goal is and always has been, to provide to you 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, Hawthorn, and Sandstone Aquifers. In 2016 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 unique potential sources of contamination identified for this system. These range from high 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.

**We are pleased to report that our drinking water meets all federal and state requirements.** 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, Jean Pierre Louis 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 4:30 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> 2016. Data obtained before January 1, 2016, 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.

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>.

**WATER QUALITY TESTING RESULTS**

<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>
Total Coliform Bacteria – (positive samples)	10/2016 12/2016	Y	2.8% 6.9 %	0	Presence of coliform bacteria in >5% of monthly samples.	Naturally present in the environment

*Microbiological Contaminants:*

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

IWSD violated Rule 62-550.828, Florida Administrative Code (F.A.C.), by failing to collect triggered source water samples within 24 hours of notification of five Total coliform-positive routine distribution samples that it collected on October 18, 2016. Rule 62-550.828, F.A.C., required this water system to collect at least one raw water sample from each of the wells that were running on October 18, 2016, by no later than October 21, 2016.

\*\* Results in the Level Detected column for radioactive contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest level detected at any of the three point-of-entry sampling points, and the range is the range of concentrations over all three of the point-of-entry sampling points.

<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>Radioactive Contaminants</b>							
Radium 226 + 228 or combined radium (pCi/L)	05/11	N	1.4	0-1.4	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	05/14	N	.0223	.0152-.0223	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	05/14	N	8.58	0-8.58	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	05/14	N	.893	.57 - .893	4	4	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.
Sodium (ppm)	05/14	N	48.14	16.8-48.14	n/a	160	Salt water intrusion, leaching from soil

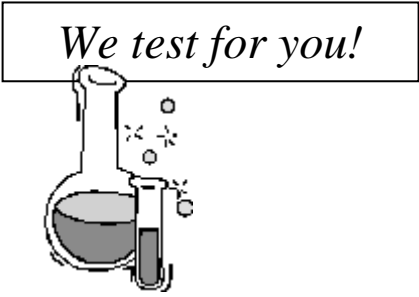
<b>Volatile Organic Contaminants</b>							
1,2-Dichloropropane (ppb)	6/16	N	1.25	N/A	0	5	Discharge from industrial chemical factories
<b>Stage 1 Disinfectants and Disinfection By-Products</b>							
For bromate, chloramines, or chlorine, the level detected is the the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine and Chloramines (ppm)	Monthly	N	2.7	2.4-3.0	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
<b>Stage 2 Disinfectants and Disinfection By-Products</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
Haloacetic Acids (HAA5) (ppb)	06/16 09/16	N	25.85	17.5-26.6	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	03/15 06/15 06/16 09/16	N	2.9	2.83-3.11	N/A	80	By-product of drinking water disinfection
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
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	07/14-09/14	N	.195	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	07/14-09/14	N	2.50	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits
<b>SECONDARY CONTAMINANTS TABLE</b>							
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>							
Iron (ppm) *TT	12/14	N	.617	.196-.617		0.3	Natural occurrence from soil leaching
<b>Note :</b> *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.							

We monitored for a specific list of Unregulated Contaminants (UCs) during the time period of 2013 - 2015 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the detected analytical results of our UC monitoring in our annual water quality report. For the complete list of results, including the non-detected contaminants, contact Jean Pierre Louis at (239) 658-3630. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

Below is the table of UCMR3 parameters that were detected at our water system:

Unregulated Contaminants			
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected	Range of Results
1,2,3-trichloropropane (ppb)	4/14	0.28	N/A
1,4-dioxane (ppb)	10/14	0.11	0.09 – 0.11
Chlorate (ppb)	10/14	1060	250 - 1060
Chromium (ppb)	4/14 10/14	0.38	0.24 - 0.38
Chromium 6 (ppb)	10/14	0.12	0.077 - 0.12
Strontium (ppb)	10/14	214	83.1 - 214
Vanadium (ppb)	10/14	0.32	0.24 – 0.32

*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.*



**In 2011, IWSD began a program to install backflow testing devices on all of the residences in Immokalee. This program was primarily funded with a grant from FDEP, through the EPA – under the ARRA stimulus program.** A backflow preventer is a means or mechanism to prevent backflow. The basic means of preventing backflow is an air gap, which either eliminates a cross connection or provides a barrier to backflow. The basic mechanism for preventing backflow is a mechanical backflow preventer, which provides a physical barrier to backflow. The principal types of mechanical backflow preventers are the reduced pressure principle assembly, the pressure vacuum breaker assembly and the double check valve assembly. The standard device required by the Immokalee Water & Sewer District is a reduced pressure principle assembly, or RPZ.

Our **Wastewater Expansion Project** began construction during 2012. It included an expansion from 2.5 mgd to 3.25 mgd at the existing wastewater facility. It also included a sewer force main from Arrowhead PUD to the wastewater plant. We began the process of switching our Residuals Management process to the **Schwing Bioset Process**. This project was completed in 2014.

Our website is frequently updated in order to provide you with necessary forms, and documents. It includes Board Meeting minutes, rates and fees, and Resolutions that may affect you, as a customer. It also has current and previous years "Quality on Tap" reports. Please visit our website at [www.iw-sd.com](http://www.iw-sd.com).



The District expects to begin construction on the **A/C and Undersized Water Lines Replacement Project** during 2017. This project is over \$20,000,000 and will be primarily funded by USDA. This project involves replacing approximately half of the water lines in Immokalee. Many of these water lines are over 30 years old. This project will be broken down into four phases, so that smaller contractors will be able to bid on the project. The phases are expected to run concurrently with each other. The construction is expected to take two years, once it begins. **During the construction of this project, water service will be disrupted.**

The District will be doing online bidding for this project – Contractors can access our project link at our website:

[http://www.iw-sd.com/index.php?p=1\\_22\\_RFP-s-RFQ-s-RFI-s](http://www.iw-sd.com/index.php?p=1_22_RFP-s-RFQ-s-RFI-s)

### **ONLINE BILL PAY NOW AVAILABLE**

For those customers who would prefer the flexibility of using online bill pay, that option is now available. For more information, contact our office on how to set up your account. Please go to the Online Bill Pay page, and then click on the link to set up your account. Once you have successfully set up your account, you can review and pay your bills at your convenience. Please go to [http://www.iw-sd.com/index.php?p=1\\_31\\_Online-Bill-Pay](http://www.iw-sd.com/index.php?p=1_31_Online-Bill-Pay) to set up your account.

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.

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).

Please DO NOT FLUSH your unused/unwanted medications down toilets or sink drains. For more information, please click here at:

<http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>.

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 40 people.

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

- Joseph Brister, Chairman
- Patricia Anne Goodnight, Vice Chairman
- Bonnie Keen, Secretary
- Fred N. Thomas, Jr., Treasurer
- Magda Ayala, Commissioner
- Robert Halman, Commissioner
- Jack Johnson, Commissioner

Board meetings are held the 3<sup>rd</sup> Wednesday of each month at 4:30 p.m.

**Please 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.**