



INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES 2003 ANNUAL DRINKING WATER QUALITY REPORT

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 source water is groundwater drawn through wells from the Floridan Aquifer and treated through a reverse osmosis process.

- ***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 Superintendent of Water Production at (772) 770 – 5068. We encourage our valued customers to be informed about their drinking water.

Indian River County Utility personnel routinely monitor for contaminants in your drinking water to assure compliance with 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 1st through December 31st 2003.

“As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, is more than one year old.”

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from wastewater 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 storm water 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 storm-water 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 may also come from gas stations, urban storm water 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.

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 (1-800-426-4791).

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.*
- *Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.*
- *Non Applicable – (N/A): Does not apply*
- *“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.*

INORGANIC CONTAMINANTS							
<u>Contaminant and Unit of Measurement</u>	<u>Dates of sampling (mo./yr.)</u>	<u>MCL Violation (Yes/No)</u>	<u>Level Detected</u>	<u>Range of Results</u>	<u>MCLG</u>	<u>MCL</u>	<u>Likely Source of Contamination</u>
Asbestos (MFL)	03/2002	No	0.94	ND - 0.94	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	01/2002	No	0.0086	0.0054 - 0.0086	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	01/2002	No	10.0	ND - 10.0	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	01/2002	No	0.879	0.869 - 0.879	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (ppb)	01/2002	No	3.1	ND - 3.1	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen) (ppm)	01/2003	No	0.008	0.005 - 0.01	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	01/2002	No	72.5	68.0 - 72.5	N/A	160	Salt water intrusion, leaching from soil
STAGE 1 – DISINFECTANT /DISINFECTION BY-PRODUCT (D/DBP) PARAMETERS DISINFECTANT							
<u>Contaminant and Unit of Measurement</u>	<u>Dates of sampling (mo./yr.)</u>	<u>MCL Violation (Yes/No)</u>	<u>Level Detected</u>	<u>Range of Results</u>	<u>MCLG</u>	<u>MCL</u>	<u>Likely Source of Contamination</u>
TTHM [Total Trihalomethane] (ppb)	Quarterly 2002	No	61.3 (annual average)	31.4 - 102.0	N/A	MCL = 100	By-product of drinking water disinfection
LEAD AND COPPER (TAP WATER)							
<u>Contaminant and Unit of Measurement</u>	<u>Dates of sampling (mo./yr.)</u>	<u>AL Violation (Yes/No)</u>	<u>90th Percentile Result</u>	<u>No. of sampling sites exceeding the AL</u>	<u>MCLG</u>	<u>AL (Action Level)</u>	<u>Likely Source of Contamination</u>
Copper (tap water) (ppm)	06/2002	No	0.041	N/A	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	06/2002	No	2.8	N/A	0	15	Corrosion of household plumbing systems, erosion of natural deposits
RADIOLOGICAL CONTAMINANTS							
<u>Contaminant and Unit of Measurement</u>	<u>Dates of sampling (mo./yr.)</u>	<u>AL Violation (Yes/No)</u>	<u>90th Percentile Result</u>	<u>No. of sampling sites exceeding the AL</u>	<u>MCLG</u>	<u>AL (Action Level)</u>	<u>Likely Source of Contamination</u>
Radium 226 (pCi/l)	04/2003	No	0.20	N/A	0	5	Erosion of natural deposits
Radium 228 (pCi/l)	04/2003	No	<1	N/A	0	5	Erosion of natural deposits
MICROBIOLOGICAL CONTAMINANTS							
<u>Contaminant</u>	<u>Dates of sampling (mo./yr.)</u>	<u>MCL</u>	<u>Highest Monthly Number of Positive Samples</u>	<u>MCLG</u>	<u>MCL</u>	<u>Likely Source of Contamination</u>	
Total Coliform Bacteria	1/03 – 12/03	No	2%	0	Presence of coliform bacteria in 5% or more of monthly samples	Naturally present in the environment	

Note: Due to an Administrative oversight, a Certificate-of-Delivery (mailing) and the results of THM analysis for 3rd & 4th quarter of 2002 were not received by the Florida Department of Environmental Protection (FDEP) to the satisfaction of their Department. These infractions have no impact on the quality of the water provided the consumer and pose no risk to health.