## 2014 Annual Drinking Water Quality Report VILLAGE CENTER COMMUNITY DEVELOPMENT DISTRICT VILLAGE CENTER SERVICE AREA DRINKING WATER SYSTEM PWS # 3350942 PREPARED AND OPERATED BY CH2MHILL

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 follow the Federal and State requirements and 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 groundwater from wells which draw water from the Floridan Aquifer and is then chlorinated for disinfection purposes prior to distribution to our customers. In 2014, the Florida Department of Environmental Protection performed a Source Water Assessment on our system and a search of the data sources indicated no potential sources of contamination near our wells. The results of the Assessment are available from the FDEP web site @ http://www.dep.state.fl.us/swapp.

If you have any questions about this report or concerning your water utility, please contact the utility operations office at (352) 753-1756.

The Village Center Service Area's Water System, which as of December 31, 2014 had 9,824 service connections, 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 to December 31, 2014. Data obtained before January 1, 2014, and presented in this report are from the most recent testing done in accordance with the Federal and State laws, rules, and regulations.

In the tables 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 that a water system must follow.

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.

MFL: millions of fibers per liter. A unit of measure used for sampling of asbestos 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 ( $\mu g/l$ ) – 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.* 

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

| Radioactive Contaminants                       |                                |                      |                   |                     |      |     |                                   |  |  |
|--|--------------------------------|----------------------|-------------------|---------------------|------|-----|-----------------------------------|--|--|
| Contaminant and Unit of<br>Measurement         | Dates of sampling<br>(mo./yr.) | MCL Violation<br>Y/N | Level<br>Detected | Range of<br>Results | MCLG | MCL | Likely Source of<br>Contamination |  |  |
| Alpha emitters (pCi/L)                         | 1/2014                         | Ν                    | 2.1               | 1.6-2.1             | 0    | 15  | Erosion of natural deposits       |  |  |
| Radium 226 + 228 or<br>combined radium (pCi/L) | 1/2014                         | Ν                    | 1.3               | ND-1.3              | 0    | 5   | Erosion of natural deposits       |  |  |

| Inorganic Contaminants                 |                                   |                      |                   |                     |      |     |   |  |  |
|--|-----------------------------------|----------------------|-------------------|---------------------|------|-----|---|--|--|
| Contaminant and Unit of<br>Measurement | Dates of<br>sampling<br>(mo./yr.) | MCL Violation<br>Y/N | Level<br>Detected | Range of<br>Results | MCLG | MCL | Likely Source of<br>Contamination   |  |  |
| Barium (ppm)                           | 1/2014                            | Ν                    | 0.00792           | 0.00783-<br>0.00792 | 2    | 2   | Discharge of drilling<br>wastes; discharge from<br>metal refineries; erosion<br>of natural deposits     |  |  |
| Nitrate (as Nitrogen) (ppm)            | 1/2014                            | Ν                    | 2.54              | 2.32-2.54           | 10   | 10  | Runoff from fertilizer<br>use; leaching from<br>septic tanks, sewage;<br>erosion of natural<br>deposits |  |  |
| Sodium (ppm)                           | 1/2014                            | Ν                    | 7.74              | 5.13-7.74           | N/A  | 160 | Salt water intrusion, leaching from soil  |  |  |

| Stage 2 Disinfectants and Disinfection By-Products           |                                   |                                 |                |                     |                  |                |   |  |  |
|--|-----------------------------------|---------------------------------|----------------|---------------------|------------------|----------------|---|--|--|
| Disinfectant or<br>Contaminant<br>and Unit of<br>Measurement | Dates of<br>sampling<br>(mo./yr.) | MCL or<br>MRDL<br>Violation Y/N | Level Detected | Range of<br>Results | MCLG or<br>MRDLG | MCL or<br>MRDL | Likely Source of<br>Contamination               |  |  |
| Chlorine (ppm)   | 1/2014-12/2014                    | Ν                               | 1.49 (avg)     | 0.49-1.78           | MRDLG = 4        | MRDL = 4.0     | Water additive<br>used to control<br>microbes   |  |  |
| Haloacetic<br>Acids (five)<br>(HAA5) (ppb)                   | 1/2014-8/2014                     | Ν                               | 9.6            | 3.85-9.6            | NA               | MCL = 60       | By-product of<br>drinking water<br>disinfection |  |  |
| TTHM [Total<br>trihalomethanes]<br>(ppb)                     | 1/2014-8/2014                     | Ν                               | 4.93           | ND-4.93             | NA               | MCL = 80       | By-product of<br>drinking water<br>disinfection |  |  |

| Lead and Copper (Tap Water)               |                                   |                        |                              |  |      |                         |  |  |  |  |
|---|-----------------------------------|------------------------|------------------------------|--|------|-------------------------|--|--|--|--|
| Contaminant and<br>Unit of<br>Measurement | Dates of<br>sampling<br>(mo./yr.) | AL<br>Violation<br>Y/N | 90th<br>Percentile<br>Result | No. of sampling<br>sites exceeding<br>the AL | MCLG | AL<br>(Action<br>Level) | Likely Source of Contamination   |  |  |  |
| Copper (tap water)<br>(ppm)               | 8/2014                            | Ν                      | 0.398                        | 0  | 1.3  | 1.3                     | Corrosion of household plumbing systems;<br>erosion of natural deposits; leaching from<br>wood preservatives |  |  |  |
| Lead (tap water)<br>(ppb)                 | 8/2014                            | Ν                      | 1.43                         | 0  | 0    | 15                      | Corrosion of household plumbing systems, erosion of natural deposits   |  |  |  |

| Secondary Contaminants                    |                                   |                         |                   |                  |      |     |   |  |  |
|---|-----------------------------------|-------------------------|-------------------|------------------|------|-----|---|--|--|
| Contaminant and<br>Unit of<br>Measurement | Dates of<br>sampling<br>(mo./yr.) | MCL<br>Violation<br>Y/N | Highest<br>Result | Range of Results | MCLG | MCL | Likely Source of Contamination                                |  |  |
| Chloride (ppm)                            | 1/2014                            | Ν                       | 17.3              | 13.0-17.3        | 250  | 250 | Natural occurrence from soil leaching                         |  |  |
| Copper (ppm)                              | 1/2014                            | Ν                       | 0.0201            | ND-0.0201        | 1    | 1   | Corrosion byproduct and natural occurrence from soil leaching |  |  |
| Sulfate (ppm)                             | 1/2014                            | Ν                       | 10.6              | 8.56-10.6        | 250  | 250 | Natural occurrence from soil leaching                         |  |  |
| Zinc (ppm)                                | 1/2014                            | Ν                       | 0.0201            | ND-0.0201        | 5    | 5   | Natural occurrence from soil leaching                         |  |  |
| Color (color units)                       | 1/2014                            | Ν                       | 10                | 10-10            | 15   | 15  | Naturally occurring organics                                  |  |  |
| Total Dissolved<br>Solids (ppm)           | 1/2014                            | Ν                       | 340               | 168-340          | 500  | 500 | Natural occurrence from soil leaching                         |  |  |

We are pleased to report that our drinking water meets all Federal and State requirements. The tables in this report list all of the drinking water contaminants we detected in 2014.

## Your water was analyzed for hardness which resulted in a value of 138 mg/L

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 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 can 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.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. 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. Village Center Service Area 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

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).

"Water is perhaps one of our most precious resources. We must be vigilant in protecting our source water, committed to conserving this resource, and diligent in the treatment and distribution of water to the community. We at CH2M HILL, Village Center Service Area are committed to delivering the highest quality drinking water possible, 24 hours a day, 365 days a year," said DeAnna Simmons, Water Operation Supervisor. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. If you have any questions or concerns about the information provided, please feel free to call (352) 753-1756.