

## **SJWD Water District (System # 4220006) Water Quality Report for 2003**

This Water Quality Report is for the calendar year 2003. The information in this report was assembled from various sources such as: (1) the South Carolina Department of Health and Environmental Control (SCDHEC) laboratory results, (2) our own laboratory data, and (3) commercial laboratory results.

### **What is the source of my water?**

SJWD's water source is the Middle Tyger River (Lyman Lake) and is treated at the SJWD water plant on Groce Road. The source of our water originates in the northern parts of Greenville and Spartanburg counties. There is very little industrial and commercial contamination in this area. Since many of you live in or use this area, we would like to encourage you to do your part to help protect these precious water supplies. We would be pleased to share with you ways to help better protect our watersheds.

Our Source Water Assessment Plan is available for your review at [www.scdhec.gov/water/html/srcwtr.html](http://www.scdhec.gov/water/html/srcwtr.html). If you do not have internet access, please contact Mike Caston to make arrangements to review this document.

### **How is my water treated?**

The SJWD Water District treatment facility uses USEPA and SCDHEC approved methodologies for making sure your water meets all drinking water requirements. The water is chemically treated to remove solids and other contaminants and to kill disease-producing organisms. The water is then filtered to further enhance the clarity and to remove small particles and microbials such as Giardia and Cryptosporidium. Additional chemicals are added to stabilize the water and inhibit corrosion in the pipeline distribution systems. During 2003, SJWD changed the treatment process to reduce disinfection-by-products (DBP's) that can be formed when chlorine is added to water containing organic contaminants. Specific information about our treatment process can be obtained by calling the SJWD treatment facility at 949-2520.

### **What if I Have Questions About My Water or This Report?**

If you would like more information about your water quality, the SJWD treatment process, or information in this report, you may contact us at 864-439-4423.

### **How Can I Be Involved?**

The Commissioners of the SJWD Water District hold regular meetings each month at the SJWD Office, 307 Spartanburg Highway, in Wellford, SC. For meeting dates and times, contact us at 864-439-4423.

Thank you for the interest you have in your water system.

Sincerely,

Mike Caston, Executive Director

## Water Quality Results

### Regulated Contaminants

SJWD Water District complied with the monitoring requirements of USEPA and SCDHEC during 2003. Critical contaminants are analyzed on a daily or more frequent basis by the SJWD certified lab. Contaminants that are not detected are analyzed on a one to five year basis. The contaminants listed below were detected. The remaining contaminants were not detected during this sampling period. This sampling period covers 2001-2003.

### Inorganic Contaminants

Contaminant (units)	MCL	MCLG	SJWD	Range	HDL	Source	Year of analysis
Turbidity (NTU)	TT	N/A	0.06	0.01-0.10	0.10	Soil runoff	2003
Fluoride (ppm)	4.0	4.0	1.0	ND-1.0	1.0	Added for dental health, erosion of natural deposits	2003
Nitrate (ppm)	10	10	0.34	ND-0.34	0.34	Naturally occurring and fertilizer runoff	2003
Chlorine (ppm)	4	4	0.6	0.5-0.7	0.7	Water additive to control microbes	2003

The EPA standard for turbidity of filtered water may not exceed 0.3 NTU in more than 5% of all the measurements taken, and must never exceed 1 NTU. Turbidity measurements are required every four hours. SJWD was in compliance with this requirement in 2003. In addition, SJWD is a member of the American Water Works Association's Partnership for Safe Water Program. This program sets a more stringent requirement for its members of 0.1 NTU turbidity 95% of the time. SJWD met this goal in 2003.

Lead and Copper were analyzed in 2003 from 30 selected sampling sites within the SJWD Water District. Ten additional samples were collected and analyzed from the Startex distribution system. The following table gives the results of this data:

Contaminant (units)	Action Level		90 <sup>th</sup> percentile	Number of sites exceeding Action Level
	Source	Year	Startex System # 4240007 90 <sup>th</sup> percentile	
Copper (ppm)	1.3	0.138	0	Corrosion of household plumbing systems
	2003	0.093		
Lead (ppb)	15	ND	0	Corrosion of household plumbing systems
	2003	1.4		

### Microbiological Contaminants

SJWD analyzed 624 samples (52 per month) from the distribution system and a sample each day from the treatment plant's finished water for total coliform bacteria. All samples analyzed were negative for coliform organisms

### Radiological Contaminants

Contaminant (units)	MCL	SJWD	Source	Year
Gross Alpha (pCi/L)	15	0.7	Erosion of natural deposits	2001

### Organic Contaminants

Contaminant (units)	MCL	SJWD	Range	Source	Year
Total Trihalomethanes (ppb)	80	59	17-86	Byproducts of Disinfection	2003
Haloacetic Acids (ppb)	60	69*	26-94	Byproducts of Disinfection	2003

\*The running annual average for HAA5 exceeded the MCL of 60 ppb during the 1<sup>st</sup> and 2<sup>nd</sup> quarter of 2003. This exceedance was due in part to the high readings recorded in the 3<sup>rd</sup> and 4<sup>th</sup> quarter of 2002. During the spring and summer of 2003, the treatment process was modified to remove some of the organic precursors in the raw water before the chlorine was added for disinfection. This modification reduced the HAA5 formation to 51.5 for the calendar year 2003.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

The abbreviations used above are defined as: SJWD = SJWD Water District, USEPA = US Environmental Protection Agency, SCDHEC = SC Department of Health and Environmental Control MCL= Maximum Contaminant Level - The highest level of the contaminant that is allowed by the current regulations. MCLG= Maximum Contaminant Level Goal - The level of a

contaminant in drinking water below which there is no known or expected health risk. ppm. = parts per million. ppb. = parts per billion  
NTU = Nephelometric Turbidity Units Action Level = The concentration of a contaminant that triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90<sup>th</sup> percentile for homes at greatest risk.  
pCi/L = Picocuries per liter is a measure of the radioactivity in water. TT = Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water. N/A = Not applicable or data not available. ND = Not Detected HDL = Highest Detected Level

## Information about Drinking Water Quality

1. 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. 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 (800-426-4791).
2. 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* are available from the Safe Drinking Water Hotline (800-426-4791).
3. Contaminants that may be present in source water include:
  - Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
  - 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.
  - Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses
  - 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.
  - Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
4. In order to ensure that tap water is safe to drink, USEPA prescribes regulations that 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.

Este informe contiene información muy importante sobre su agua de beber si no lo comprende, hable con alguien que se lo pueda explicar.