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 informacion muy importante sobre su agua de beber si no lo comprende, hable con alquien que se lo pueda explicar.

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SJWD Water District System #4220006
Water Quality Report
2009

This Water Quality Report is for the calendar year 2009. The information in this report was assembled from various sources such as:

- South Carolina Department of Health and Environmental Control (SCDHEC) laboratory results
- SJWD laboratory data
- Commercial laboratory results

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On behalf of the Commissioners of the SJWD Water District, I am happy to provide you, our customer, the following information about your drinking water. During 2009, the treated water leaving the treatment plant met all the USEPA and SCDHEC regulations.

About SJWD Water District:

The South Carolina General Assembly passed legislation creating the Startex Jackson Wellford Duncan Water District, a special purpose district, in 1956 for the purpose of providing drinking water to Western Spartanburg County. The legislation established a District boundary and provided the authority to sell bonds.

Over the years the District has grown. Today its service area covers approximately 130 square miles in Western Spartanburg County. The service area stretches from Highway 417 in the South, to Highway 11 in the North, and from I-26 in the East, to the Greenville County line in the West. As of December 2009, the District served approximately 20,000 accounts. The number of customers has increased by 70% since 1990.

SJWD Water District Mission:

Provide excellent quality water and service to our current and future consumers while continuously improving cost effectiveness. We accomplish this through the efforts of our employees, by developing them to their full potential, through sound business practices and optimal use of technology.

What Is The Source of My Water?

SJWD's water source is the Middle Tyger River (Lyman Lake) and the North Tyger River (Lake Cooley and North Tyger Reservoir). All the source water is treated at the SJWD water plant on Groce Road in Lyman SC. 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/srcewtr.html. A copy of the plan is also available at our office. In summary, this report contains the completed groundwater susceptibility assessment for the SJWD Water District, System No. 4220006. The system includes public supply intakes: S42104. The system is located in Spartanburg, South Carolina and serves a primary population of 45,000. The system is located in the Broad Basin(s). Of the 63 potential contaminant sources (PCSs) in the initial inventory, 44 PCSs had more than one category of contaminants. The inventory includes 40 PCSs with volatile organic compounds (VOCs), 50 PCSs with petroleum products, 32 PCSs with metals, 8 PCSs with nitrates, 2 PCSs with pesticides/herbicides, 3 PCSs with pathogens, no PCSs with radionuclides, and no PCSs with undetermined contaminants. The susceptibility analysis determined 30 PCSs with a high susceptibility ranking, 24 PCSs with a moderate susceptibility ranking, and 9 PCSs with low susceptibility ranking.

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 2009, SJWD continued to use the treatment process to reduce disinfection-by-products (DBP's) that can be formed when chlorine is added to water containing organic contaminants. The enclosed water quality data shows how SJWD water compares to the EPA established maximum contaminant levels.

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 by calling the SJWD treatment facility at 864-949-2831.

How Can I Be Involved?
The Commissioners of SJWD Water District hold monthly meetings at the SJWD administration office (307 Spartanburg Highway, Wellford, SC). These meetings are open to the public and an agenda is posted in the lobby of our administration office. Please contact us in advance if you wish to be included on the agenda. For more information, please contact us at 864-439-4423.
Thank you for the interest you have in your water system.
Sincerely,

Mike Caston, Executive Director

SJWD Water District (System #4220006)
Water Quality Report
2009

Regulated Contaminants
SJWD Water District (System #SC4220006) complied with the monitoring requirements of USEPA and SCDHEC during 2009. 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 2009.
This report also includes information for Startex (System #SC4240007) which received water from the SJWD Water District. The Startex system was totally incorporated into the SJWD system in October 2009.

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	SJWD Avg.	Range	HDL	Violation	Source	Year of analysis
Turbidity (NTU) see note[1]	TT	N/A	0.05	0.03-0.09	0.09	N	Soil runoff	2009
Fluoride (ppm)	4.0	4.0	1.0	<0.10-1.39	1.39	N	Added for dental health, erosion of natural deposits, runoff from fertilizer factories	2009
Nitrate (ppm)	10	10	0.18	N/A	0.18	N	Naturally occurring and fertilizer runoff	2009
Chlorine (ppm) For SJWD System	4	4	0.50	0.37-0.62	0.62	N	Water additive to control microbes	2009
Chlorine (ppm) For Startex System	4	4	0.51	0.27-0.73	0.73	N	Water additive to control microbes	2009

[1]Turbidity is a measurement taken to determine the clarity of the water. The EPA standards 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 monitored continually on each filter effluent and recorded every fifteen minutes. SJWD was in compliance with this requirement in 2009. 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 0.10 NTU turbidity 95% of the time. **SJWD met this goal in 2009.**

Lead and Copper samples were analyzed from 60 selected sampling sites within the SJWD Water District. The following table gives the results of this data. All samples were in compliance for lead and copper.
Ten samples were analyzed from the Startex System during July-August of 2009. Lead was not detected in any samples and all samples were within compliance for copper.
Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Infants and young children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. It is advisable to flush your cold water tap for up to 2 minutes before using for drinking or cooking. Detailed information concerning lead and copper health effects can be obtained by contacting SJWD. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Contaminant (units)	Action Level	90th percentile	Number of sites exceeding Action Level	Violation	Source	Year
Copper (ppm) For SJWD System	1.3	0.072	0	N	Corrosion of household plumbing systems	2009
Lead (ppb) For SJWD System	15	0.00	2	N	Corrosion of household plumbing systems	2009
Copper (ppm) For Startex System	1.3	0.026	0	N	Corrosion of household plumbing systems	2009
Lead (ppb) For Startex System	15	0.00	0	N	Corrosion of household plumbing systems	2009

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.

Fecal coliform/E.Coli: Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

SJWD analyzed 651 samples from the distribution system and a sample each day from the treatment plant's finished water for total coliform bacteria. Of the 651 samples from the distribution system, 646 (99.2%) were absent of total coliform organisms. The follow up samples of the 5 positive samples were absent of total coliform organisms. The EPA standard for total coliforms is 95% of all samples collected must be absent of total coliforms. **SJWD was in compliance with this requirement during 2009.**

Of the 40 samples collected within the Startex System, 40 (100%) samples were negative for total coliforms.

Contaminant	Maximum Contaminant Level goal	Maximum Contaminant Level	Highest # (P)	Violation	Source	Year
Total Coliform For SJWD System	0	5% of monthly samples (P)	3.7	N	Naturally present in the environment	2009
Total Coliform For Startex System	0	5% of monthly samples (P)	0	N	Naturally present in the environment	2009
Fecal Coliform For SJWD System	0		0	N	Naturally present in the environment	2009
Fecal Coliform For Startex System	0		0	N	Naturally present in the environment	2009

Organic Contaminants
Total Organic Carbon: Total organic carbon (TOC) has no health effects. However, total organic carbon (TOC) provides a medium for the formation of disinfection by-products. These by-products include trihalmethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. The listed values for TTHM's and HAA's are based on the running annual average of four representative sample sites in the SJWD distribution systems that are sampled quarterly by SCDHEC. The range represents the minimum and maximum of all the individual samples collected during the year. In addition to these values, SJWD collects and analyzes samples from these 4 sites plus 4 others on a monthly basis. Results from all these extra samples were below the MCL. **SJWD was in compliance with this requirement during 2009.**

SJWD is required to remove 35% of the source water TOC through the treatment process if the source water or treated water TOC is greater than 2 mg./l. . ***This requirement was met during 2009.***

Contaminant (units)	MCL	SJWD	Range	Violation	Source	Year of analysis
Total Trihalomethanes (ppb)	80	36	15-60	N	Byproducts of Disinfection	2009
Haloacetic Acids (ppb)	60	32	14.4-35	N	Byproducts of Disinfection	2009
Total Organic Carbon (% removed)	TT	50%	37%-63%	N	Naturally occurring and runoff	2009

Radioactive Contaminants (2007 data)

Contaminant (units)	MCL	SJWD	Violation	Source	Year of analysis
Gross Alpha (piC/l.) Excluding radon and uranium	15	0.0527	N	Erosion of natural deposits	2007
Combined Radium (226/228) (piC/l.)	5	0.141	N	Erosion of natural deposits	2007

Gross alpha. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Unregulated Parameters: SJWD routinely monitors for certain water quality parameters that are not regulated.

Contaminant (units)	MCL	MCLG	SJWD	Range	HDL	Source	Year of analysis
pH (Std units)	N/A	N/A	7.45	7.3-7.6	7.6	Naturally occurring and added for corrosion inhibition	2009
Phosphate (ppm PO4)	N/A	N/A	0.99	0.47-1.15	1.15	Added for corrosion inhibition	2009

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 = Nepholometric 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 90th percentile for homes at greatest risk.
piC/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
(A) = absent for organism (P) = present for organism
(Y) = yes (N) = no