

2010
Laurens Commission of Public Works
Annual Drinking Water Quality Report

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

We're pleased to present to you the 2010 Annual Water Quality Report. This report is designed to inform you about the quality of 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 water source is Lake Rabon, which is located on SC Hwy 252 approximately 8 miles west of the Water Treatment Facility in Laurens. Lake Rabon is owned and operated by the Laurens County Water and Sewer Commission. Its construction was completed in 1987, under the Federal Watershed Protection and Flood Prevention Act, as a multipurpose reservoir for flood control, water supply, and recreation. Lake Rabon contains 2,426 acre-feet of storage for municipal and industrial water needs.

If you have any questions about this report or concerning your water utility, please contact the LCPW at (864)-681-4300 or you can e-mail us at: feedback@lcpw.com. We want our valued customers to be informed about their water utility operations. If you want to learn more, please attend any of our regularly scheduled meetings. They are open to the public and held each month on the second Monday at 9:00 AM, at 212 Church Street, Laurens, S.C.

Our Source Water Assessment Plan is available for your review at www.scdhec.gov/water/html/srcwtr.html. If you do not have Internet access, please contact our office to make arrangements to review this document.

The LCPW routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2010. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find many terms and abbreviations with which you might not be familiar. To help you better understand these terms, we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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

Maximum Contaminant Level (MCL) - The "Maximum Allowed" (MCL) is 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 (MCLG) -The "Goal"(MCLG) is 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 (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 (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.

Total Organic Carbon (TOC) Removal - The percent removal must be at least 1 or the system is in violation.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	N	0	CFU/100ML	0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
2. Fecal coliform and <i>E.coli</i>	N	0	CFU/100ML	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
3. Total Organic Carbon	N	<u>54.0</u> 35	TT	n/a	TT	Naturally present in the environment
4. Turbidity (Combined Filter Effluent)	N	0.050 NTU	NTU	1	TT	Soil runoff
Radioactive Contaminants						
5. Beta/photon emitters	NA	NA	mrem/yr	0	4	Decay of natural and man-made deposits
6. Alpha emitters	N	.3	pCi/1	0	15	Erosion of natural deposits
7. Combined radium	N	.20	pCi/1	0	5	Erosion of natural deposits
8. Uranium	N	.2	µg/L	0	30	Erosion of natural deposits
Inorganic Contaminants Less than DL						
9. Alkalinity	N	Y	29.4 ppm	NA	NA	Naturally present in the environment
10. Antimony	N	Y	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
11. Arsenic	N	Y	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
12. Asbestos	N	Y	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
13. Barium	N	Y	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Beryllium	N	Y	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
15. Cadmium	N	Y	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
16. Chromium	N	Y	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
17. Cyanide	N	Y	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
18. Fluoride	N	Y	.95 ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
19. Hardness	N	Y	44.8 mg/l	NA	NA	Mineral Content
20. Mercury (inorganic)	N	Y	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
21. Nitrate (as Nitrogen)	N	.037	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Nitrite (as Nitrogen)	N	Y	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
23. pH	N	Y	7.64 su	NA	NA	Measure of hydrogen ion activity
24. Selenium	N	Y	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

25. Sodium	N	Y	5.5 ppm	NA	NA	Naturally present in the environment
26. Thallium	N	Y	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
LEAD AND COPPER TEST RESULTS (year)						
Contaminant	Violation Y/N	90th percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
27. Copper	N	0.012	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
28. Lead	N	1.30	ppb	15	0	Corrosion of household plumbing systems, erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides						
29. 2,4-D	N	Y	ppb	70	70	Runoff from herbicide used on row crops
30. 2,4,5-TP (Silvex)	N	Y	ppb	50	50	Residue of banned herbicide
31. Acrylamide	NA	NA	TT	0	TT	Added to water during sewage/wastewater treatment
32. Alachlor	N	Y	ppb	0	2	Runoff from herbicide used on row crops
33. Atrazine	N	Y	ppb	3	3	Runoff from herbicide used on row crops
34. Benzo(a)pyrene (PAH)	N	Y	nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
35. Carbofuran	N	Y	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
36. Chlordane	N	Y	ppb	0	2	Residue of banned termiticide
37. Dalapon	NA	NA	ppb	200	200	Runoff from herbicide used on rights of way
38. Di(2-ethylhexyl) adipate	N	Y	ppb	400	400	Discharge from chemical factories
39. Di(2-ethylhexyl) phthalate	N	Y	ppb	0	6	Discharge from rubber and chemical factories
40. Dibromochloropropane	NA	NA	nanograms/1	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
41. Dinoseb	N	Y	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
42. Diquat	N	Y	ppb	20	20	Runoff from herbicide use
43. Dioxin [2,3,7,8-TCDD]	NA	NA	picograms/l	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
44. Endothall	N	Y	ppb	100	100	Runoff from herbicide use
45. Endrin	N	Y	ppb	2	2	Residue of banned insecticide
46. Epichlorohydrin	NA	NA	TT	0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
47. Ethylene dibromide	N	Y	nanograms/1	0	50	Discharge from petroleum refineries
48. Glyphosate	N	Y	ppb	700	700	Runoff from herbicide use
49. Heptachlor	N	Y	nanograms/1	0	400	Residue of banned termiticide
50. Heptachlor epoxide	N	Y	nanograms/1	0	200	Breakdown of heptachlor
51. Hexachlorobenzene	N	Y	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
52. Hexachlorocyclopentadiene	N	Y	ppb	50	50	Discharge from chemical factories
53. Lindane	NA	NA	nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
54. Methoxychlor	N	Y	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
55. Oxamyl [Vydate]	N	Y	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
56. PCBs [Polychlorinated biphenyls]	NA	NA	nanograms/1	0	500	Runoff from landfills; discharge of waste chemicals
57. Pentachlorophenol	N	Y	ppb	0	1	Discharge from wood preserving factories
58. Picloram	N	Y	ppb	500	500	Herbicide runoff
59. Simazine	N	Y	ppb	4	4	Herbicide runoff
60. Toxaphene	N	Y	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants						
61. Benzene	N	Y	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills

62. 2002-2. Bromate	NA	NA	ppb	10	0	By-product of drinking water chlorination
63. Carbon tetrachloride	N	Y	ppb	0	5	Discharge from chemical plants and other industrial activities
64. 2002-3. Chloramines	NA	NA	ppm	MRDL= 4	MRDLG= 4	Water additive used to control microbes
65. 2002-4. Chlorine	N	1.23	ppm	MRDL= 4	MRDLG = 4	Water additive used to control microbes
66. 2002-5. Chlorite	N	.673	ppm	1	0.8	Water additive used to control microbes
67. 2002-6. Chlorine Dioxide*	N	.003	ppb	MRDL = 80	MRDLG = 8	Water additive used to control microbes
68. Chlorobenzene	NA	NA	ppb	100	100	Discharge from chemical and agricultural chemical factories
69. o-Dichlorobenzene	N	Y	ppb	600	600	Discharge from industrial chemical factories
70. p-Dichlorobenzene	N	Y	ppb	75	75	Discharge from industrial chemical factories
71. 1,2 - Dichloroethane	NA	NA	ppb	0	5	Discharge from industrial chemical factories
72. 1,1 - Dichloroethylene	NA	NA	ppb	7	7	Discharge from industrial chemical factories
73. cis-1,2-ichloroethylene	NA	NA	ppb	70	70	Discharge from industrial chemical Factories
74. trans - 1,2 - Dichloroethylene	N	Y	ppb	100	100	Discharge from industrial chemical factories
75. Dichloromethane	N	Y	ppb	0	5	Discharge from pharmaceutical and chemical factories
76. 1,2-Dichloropropane	NA	NA	ppb	0	5	Discharge from industrial chemical factories
77. Ethylbenzene	N	Y	ppb	700	700	Discharge from petroleum refineries
78. 2002-7. Haloacetic acids (HAAs)	N	38 Running annual average	ppb	60	N/a	By-product of drinking water disinfectant
79. Styrene	N	Y	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
80. Tetrachloroethylene	N	Y	ppb	0	5	Discharge from factories and dry cleaners
81. 1,2,4 - Trichlorobenzene	NA	NA	ppb	70	70	Discharge from textile-finishing factories
82. 1,1,1 - Trichloroethane	NA	NA	ppb	200	200	Discharge from metal degreasing sites and other factories
83. 1,1,2 -Trichloroethane	NA	NA	ppb	3	5	Discharge from industrial chemical factories
84. Trichloroethylene	N	Y	ppb	0	5	Discharge from metal degreasing sites and other factories
85. TTHM [Total trihalomethanes]	N	48 Running annual average	ppb	80	n/a	By-product of drinking water chlorination
86. Toluene	N	Y	ppm	1	1	Discharge from petroleum factories
87. Vinyl Chloride	N	Y	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
88. Xylenes	N	Y	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

The CPW was monitored for the Unregulated Contaminant Monitoring Regulation 2 (UCMR-2) during this period. No detections were noted. If you would like to receive a list of the contaminants monitored, please call the CPW at 864-681-4300.

* Due to low levels, the CPW has now been placed on a reduced monitoring (quarterly) program.

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. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is safe at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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.

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).