



Water - Essential for Life

Salyersville Water and Sewer Commission Water Quality Report for year 2015

401 College Street
Salyersville, Ky. 41465

KY0770566

Manager: Shawn Rowe

Phone: 606-349-3743

Meetings: Salyersville Water Plant

CCR Contact: Nora Bauer

Meeting Dates and Time: Last Tuesday each month 10:00 AM

Phone: 606-349-3743

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

We treat surface water from the Licking River and groundwater from two wells as a supplemental supply. A susceptibility analysis evaluates the potential for contaminants to enter the water supply. Potential contaminant sources of concern include major roads, 8 bridges and culverts, and 25 commercial/industrial sites. Each of these potential sources of contamination is rated high in the susceptibility analysis table because of the contaminant type, their proximity to the intake, and the high chance of release. Activities and land use within the watershed can pose potential risks to your drinking water, especially during drought. Under certain circumstances, contaminants could be released that would pose challenges to water treatment plants, or contaminate your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. The complete source water assessment can be reviewed at the Big Sandy Area Development District office in Prestonsburg, KY

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 water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities).

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Some or all of these definitions may be found in this report:

Information About Lead:

Maximum Contaminant Level (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 (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.

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

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, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - 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) - 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) - a measure of the radioactivity in water.

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

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

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variations & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

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. Your local public water system 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>.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. 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 the data in this table, though representative, may be more than one year old.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source		
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.5	93	Yes	Soil runoff		
Regulated Contaminant Test Results							
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants							
Combined radium (pCi/L)	5	0	1.72	1.72 to 1.72	Jun-13	No	Erosion of natural deposits
Inorganic Contaminants							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.051 (90th percentile)	0.001 to 0.067	Jul-13	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.8	0.8 to 0.8	Mar-15	No	Water additive which promotes strong teeth
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.16 (lowest average)	0.83 to 1.74 (monthly ratios)	2015	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.18 (highest average)	0.74 to 1.83	2015	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	50 (high site average)	27 to 73 (range of individual sites)	2015	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	59 (high site average)	19 to 97 (range of individual sites)	2015	No	Byproduct of drinking water disinfection.

Maximum Contaminant Levels (MCL's) 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.

Violation: Turbidity

We received a violation on 4/29/2015 for failing to meet the treatment technique requirement turbidity by exceeding 0.3 NTU in over 5% of the combined filter effluent (CFE) samples collected in the compliance period 02/01/2015 - 02/28/2015. The requirement is to maintain CFE turbidity below 0.3 NTU in 95 % of monthly measurements. We exceeded 0.3 NTU in 10 of the 166 samples collected due to snow melt that caused excessive runoff which increased turbidity in the river. We made chemical adjustments in the treatment process to better control turbidity. We were in compliance the following month.

Health Effects:

Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Violation: Public Notice

We received a violation on 7/28/2015 for failing to perform public notification for Chlorine violations in 2013. We performed the public notification; however the certification form was missing the primary distribution date for violation 2013-9951334 and 2013-9951336. We have since made corrections and resubmitted the certification form to the Division of Water. There are no public health effects associated with this violation.

PUBLIC NOTIFICATION

Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 04/01/2015 - 04/30/2015, 11/1/15 - 11/30/15 & 12/1/15 - 12/31/15 we did not complete all monitoring or testing for Total Organic Carbon, Chlorine & Turbidity and therefore cannot be sure of the quality of your drinking water during that time.

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for this contaminant and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were or will be taken
Total Organic Carbon	Monthly	2	April 2015	April 2015

The table below lists report(s) we did not properly complete or submit during the last year, how often we are supposed to report, when the report was due, when report should have been submitted, and the date on which the report was (or will be) submitted.

Report	Report frequency	Report Due	When report should have been submitted	When report was submitted
Chlorine	Monthly	10th day of the month	November 2015	March 2016
Chlorine			December 2015	
Turbidity			December 2015	

What happened? Who is at risk? What is being done?

Total Organic Carbon violation: The samples were collected; however our contract laboratory used a duplicate sample number when reporting the results to the Division of Water. Therefore, the sample was invalidated due to the duplicate number and we received a monitoring violation. The laboratory has since corrected the sample number and resubmitted the results.

Chlorine and Turbidity violations: The Monthly Operating Report contains information about the operation of the treatment plant and distribution system that is used to determine compliance with the Safe Drinking Water Act. The reports for November & December 2015 were missing the summary pages and therefore compliance could not be determined for chlorine and turbidity. Upon receiving the violations the summary pages were immediately sent to the Division of Water.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.