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2018 Consumer Confidence Report Data SPRING VALLEY WATERWORKS, PWS ID: 64802496

Water System Information

If you would like to know more about the information contained in this report, please contact Joel Stark at (715) 778-4238.

Opportunity for input on decisions affecting your water quality

Meetings are held the first Wednesday of every month at 6:15 at the village hall located at E121 S. Second Street.

Health Information

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 can be obtained by calling the Environmental Protection Agency's safe drinking water hotline (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 systems 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

Source ID	Source	Depth (in feet)	Status
2	Groundwater	325	Temp. Abandoned as of 04/19/19

Source ID	Source	Depth (in feet)	Status
3	Groundwater	377	Active

To obtain a summary of the source water assessment please contact, Joel Stark at (715) 778-4238.

Educational Information

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:

- 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.

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, which shall provide the same protection for public health.

Definitions

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
HAA5 (ppb)	DBP2	60	60	2	2		No	By-product of drinking water chlorination
TTHM (ppb)	DBP2	80	0	2.2	2.2		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
BARIUM (ppm)	2	2		0.019	0.019	8/2/2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)	4	4		0.1	0.1	8/2/2017	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
MERCURY (ppb)	2	2		0.2	0.2	8/2/2017	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
SODIUM (ppm)		n/a	n/a	1.82	1.82	8/2/2017	No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
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Term	Definition
	both, on multiple occasions.
MCL	Maximum Contaminant Level: 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.
MCLG	Maximum Contaminant Level Goal: 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.
MFL	million fibers per liter
MRDL	Maximum residual disinfectant level: 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.
MRDLG	Maximum residual disinfectant level goal: 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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
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Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.2330	0 of 10 results were above the action level.	8/9/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	0.00	0 of 10 results were above the action level.	8/9/2017	No	Corrosion of household plumbing systems; Erosion of natural deposits

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2018)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	0.9	0.9	7/7/2014	No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	1.8	1.8	7/7/2014	No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	0.9	0.9	7/7/2014	No	Erosion of natural deposits

Additional Health Information

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. Spring Valley Waterworks 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 www.epa.gov/safewater/lead.

Presence of Other Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less

Other Compliance

Uncorrected Significant Deficiencies

Deficiency Description and Progress to Date	Date System Notified	Scheduled Correction Date
2. The old, cast iron water main leaving the MW3 wellhouse has significant corrosion. The older line needs to be replaced. This needs to be resolved no later than December 31, 2017. (ch. NR810.13 Wis. Adm. Code)	10/9/2015	12/31/2019
5. Ground storage reservoir does not have an emergency overflow line as required under ch. NR811.64(4) Wis. Adm. Code. This needs to be resolved by December 31, 2017. Submit plans and specifications by November 1, 2016 and complete the necessary work by December 31, 2017.	10/9/2015	12/31/2019
6. Ground storage reservoir's concrete roof coating and concrete itself is breaking down through the spalling process. There is significant aggregate showing in some areas. While you could clean up and recoat the unit, it should probably be insulated and topped with an EPDM membrane to protect it from further damage. The unit will either need to be repaired, replaced, or decommissioned by December 31, 2017. Submit plans and specifications by November 1, 2016 for the option you select and complete the necessary work by December 31, 2017. (NR810.13 and .14 Wis. Adm. Code)	10/9/2015	12/31/2019
7. Ground storage reservoir's hatch is not properly sealed and the concrete curb is cracking. Spalling is significant in some areas and will likely progress if not properly addressed. You may be able to install another hatch curb, by mechanically attaching it to the roof just outside the current hatch, and then properly insulating it. The unit will either need to be repaired, replaced, or decommissioned by December 31, 2017. Submit plans and specifications by November 1, 2016 for the option you select and complete the necessary work by December 31, 2017. (NR810.13 and .14 Wis. Adm. Code)	10/9/2015	12/31/2019
8. Suction pressure at the east booster station does not appear to	10/9/2015	12/31/2019

Deficiency Description and Progress to Date	Date System Notified	Scheduled Correction Date
<p>have a positive pressure head above the ground surface for the entire length of the booster station's buried service line during all operating conditions. Please submit information on the hydraulic grade level in relation to the service line and ground cover above it for all operating conditions (when no booster pumps are being operated, when all the booster pumps are operating, at the reservoirs low operating level and the low suction pressure shutoff point). Also, report the elevation (MSL) of the reservoir floor, reservoir operating levels, and floor of the east booster station. There seems to be conflicting information being provided on some of these figures. If the hydraulic grade line information does not support this finding, no action is necessary. If the finding is confirmed, improvements or design modifications will be needed to resolve the significant deficiency by December 31, 2017. In this case, submit plans and specifications by November 1, 2016. (ch. NR811.37(1) and ch. NR811 Subchapter XI Wis. Adm. Code)</p>		
<p>2. Sig. Def. (2015 Survey) 05. Ground storage reservoir does not have an emergency overflow line as required under ch. NR811.64(4) Wis. Adm. Code. This needs to be resolved by December 31, 2017. Submit plans and specifications by November 1, 2016 and complete the necessary work by December 31, 2017. There are many issues that are leading to it to be abandoned in 2019. The due date here is Extend to 12/31/2019. This includes no overflow, no splash pad, no screening on overflow, unknow if there is a bypass. The drain down inspection would be due in 2019, but it is to be abandoned, and there is no membrane cover.</p>	5/11/2018	12/31/2019
<p>3. Sig. Def. (2015 Survey) 06. Ground storage reservoir's concrete roof coating and concrete itself is breaking down through the spalling process. There is significant aggregate showing in some areas. While you could clean up and recoat the unit, it should probably be insulated and topped with an EPDM membrane to protect it from further damage. The unit will either need to be repaired, replaced, or decommissioned by December 31, 2017. Submit plans and specifications by November 1, 2016 for the option you select and complete the necessary work by December 31, 2017. (NR 810.13 and .14 Wis. Adm. Code) To be abandoned in 2019. Extended to 12/31/2019</p>	5/11/2018	12/31/2019
<p>4. Sig. Def. (2015 Survey) 07. Ground storage reservoir's hatch is not properly sealed and the concrete curb is cracking. Spalling is significant in some areas and will likely progress if not properly addressed. You may be able to install another hatch curb, by mechanically attaching it to the roof just outside the current hatch,</p>	5/11/2018	12/31/2019

Deficiency Description and Progress to Date	Date System Notified	Scheduled Correction Date
<p>and then properly insulating it. The unit will either need to be repaired, replaced, or decommissioned by December 31, 2017. Submit plans and specifications by November 1, 2016 for the option you select and complete the necessary work by December 31, 2017. (NR 810.13 and .14 Wis. Adm. Code) To be abandoned in 2019. Extended to 12/31/2019</p>		
<p>5. Sig. Def. (2015 Survey) 08. Suction pressure at the east booster station does not appear to have a positive pressure head above the ground surface for the entire length of the booster station's buried service line during all operating conditions. Please submit information on the hydraulic grade level in relation to the service line and ground cover above it for all operating conditions (when no booster pumps are being operated, when all the booster pumps are operating, at the reservoirs low operating level and the low suction pressure shutoff point). Also, report the elevation (MSL) of the reservoir floor, reservoir operating levels, and floor of the east booster station. There seems to be conflicting information being provided on some of these figures. If the hydraulic grade line information does not support this finding, no action is necessary. If the finding is confirmed, improvements or design modifications will be needed to resolve the significant deficiency by December 31, 2017. In this case, submit plans and specifications by November 1, 2016. (ch. NR811.37(1) and ch. NR811 Subchapter XI Wis. Adm. Code) Extended to 12/30/2019. This is due to pressure gauges reading the following Suction Pressure-140" H2O, Pump Discharge Pressure 75" H2O which is below 20 psi minimum. Extended to 12/30/2019 as this will be corrected as part of the tower upgrades.</p>	5/11/2018	12/31/2019
<p>1. Sig. Def. (2015 Survey) 02. The old, cast iron water main leaving the MW3 wellhouse has significant corrosion. The older line needs to be replaced. This needs to be resolved no later than December 31, 2017. (ch. NR 810.13 Wis. Adm. Code) Extended to 12/31/2019</p>	5/11/2018	12/31/2019

Actions Taken

The Village is working on all deficiencies with our engineering firm Cedar Corporation and DNR Engineer Corey Larson.