



Timeline of City of Louisburg Cloudy Water Incident November 2019

Monday, Nov. 18 – The Spring Valley Road water tower was taken offline for regularly scheduled maintenance by a contractor

Tuesday, Nov. 19 – There was a problem with the maintenance work therefore water was pumped from the water plant located southwest of town on the Marias Des Cygnes river directly into town. Normal pressure coming into town from gravity feed is normally 65-70 psi. The pressure increased to 100-120 psi because the water was force-fed rather than being gravity-fed because it had to bypass the tower. The high pressure movement of the water then caused a break up of calcium carbonate that builds up on pipe walls in City-owned water lines and water lines in homes and businesses. This in turn affected the water clarity.

That day the water department staff contacted Kansas Department of Health & Environment to alert them of the situation and ask if any additional steps should be taken. KDHE recommended flushing and constant monitoring of chlorine levels. Public Works staff started flushing lines by opening fire hydrants. Water main flushing continued through Dec. 6.

Municipalities are required to take a sample once a day to test chlorine levels. After talking to KDHE, water department staff took two to four samples each day in multiple locations checking the chlorine levels. These increased samples were taken each day from Nov. 19 through Dec. 8. Chlorine levels were in the KDHE-acceptable ranges in all those tests.

This message was posted to Facebook: *Louisburg residents might notice discoloration in the local water supply due to scheduled maintenance work at the Spring Valley Road water tower. The water supply is safe to drink and meets state standards for drinkable water. The water should clear up in the next few days.*

Wednesday, Nov. 20 - A sample was taken today for the monthly bacteria testing. This sample is taken from a random location within the city each month. These samples are sent to the KDHE testing lab. The sample was absent of Total Coliform and E. coli. The chlorine level was 1.6. Chlorine levels should be between 1.0 and 4.0 as allowed by State regulations.

Thursday, Nov. 21 – This message was posted to Facebook: *The water in Louisburg remains safe to drink although it is ranging from slightly cloudy to very cloudy in some areas of town due*

to maintenance to the water supply system. The Spring Valley Road water tower is under maintenance and as a result water is being moved to Louisburg at a higher pressure than normal, causing the water to appear cloudy. Water quality is being monitored constantly and is treated properly. Adjustments have been made in the pressure and the water appearance should clear up in the next few days. Public Works has started flushing hydrants to move the water through the lines and it is hoped this will clear up the cloudiness faster.

Monday, Nov. 25 – An additional sample was taken today for another bacteria test. This sample also came back absent for Total Coliform and E. coli with chlorine level at 2.0.

This message was posted to Facebook: The work on the City of Louisburg water tower on Spring Valley Road is expected to be completed today. The tower will be back in service tomorrow. The water has cleared in most locations throughout town. Some areas did not experience any issues while others were more prone to the cloudy water. If the water is still cloudy where you live, that should be resolved when the tower is back in service. Please instant message city staff via Facebook with your location or call City Hall at 837-5371 ext 0 if the water in your area is still problematic so city crews can open fire hydrants for more line flushing.

Tuesday, Nov. 26 – Work on the Spring Valley Road tower was completed, filled and isolated to sit overnight.

Wednesday, Nov. 27 – A sample was taken from the Spring valley Road water tower to check for bacteria and was submitted to PACE, a KDHE-approved testing facility.

Friday, Nov. 29 – The water tower bacteria test came back as absent for Total Coliform and E. coli and the tower was put back into service.

Wednesday, Dec. 4 - This information was posted to Facebook. *The Kansas Department of Health and Environment has provided information to the City of Louisburg to share with residents who may still be experiencing cloudy water. Complete instructions are available on the City's website: <https://bit.ly/386KHhq>*

This is the information as provided in the above link that is on the City's website:

Flushing Interior Plumbing Consumer Information

The Kansas Department of Health and Environment has provided information to the City of Louisburg to share with residents who may still be experiencing cloudy water. These step-by-step [instructions](#) for flushing interior plumbing can be completed by the resident and don't require any special tools or a service call to a plumber.

The City of Louisburg and KDHE have been in contact during the water situation and both entities are monitoring water quality.

The cloudy water in Louisburg's water supply is a result of scheduled maintenance to the Spring Valley Road water tower and water being moved from the water treatment plant to the city at a higher-than-normal pressure that has caused water discoloration. The water supply is safe to drink and meets state standards as verified by the Kansas Department of Health and

Environment (KDHE). The City of Louisburg has been in contact with KDHE since the beginning and followed every recommended step.

The Spring Valley Road tower is now back online and many households are reporting their water is now clear. City crews are still flushing water by opening hydrants in trouble spots. The public works department staff estimate they have flushed approximately half a million gallons of water through the lines in an effort to speed up the process.

Thursday, Dec 5 – Four samples were taken from multiple locations inside the city limits and were taken to the KDHE lab in Topeka for testing for bacteria.

Friday, Dec. 6 – Results from the samples taken yesterday were received from KDHE and all were absent for Total Coliform and E. coli with chlorine levels ranging from 1.3 to 1.8.

The results from the six bacteria tests are attached. KDHE's instruction sheet for water line flushing as mentioned on the website post is attached.

At no point during this timeframe was water unsafe to consume or use. All testing reported an absence of bacteria and chlorine levels remained in the acceptable range. KDHE had no concerns with the steps the City was taking to stay on top of the situation.



Kansas Health & Environmental Laboratories
6810 SE Dwight Street
Topeka, KS 66620
Phone (785) 296-1620
Fax (785) 559-5205

ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: G BROWN

Collection ID/Chain #: 365945

Location Desc: 29146 S RODGERS

Lab ID:	1255177	Matrix:	Drinking Water								
Sample ID:	150417-2	Date Collected:	11/20/2019 13:45								
Description:	DS1	Date Received:	11/21/2019 10:31								
Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
Sample Type	RT										
Sampling Point	RTOR										
Analysis Desc: SM 9223-B		Preparation Method: Microbiology									
		Analytical Method: SM 9223-B									
Total Coliform via P/A	Absent			1		11/21/2019 12:35	DV	11/22/2019 08:22	MAH		
E. coli via P/A	Absent			1		11/21/2019 12:35	DV	11/22/2019 08:22	MAH		
Analysis Desc: N/A		Analytical Method: N/A									
Total Chlorine Residual	1.6			1				11/22/2019 09:56	EIE		

Report Date: Monday, November 25, 2019 5:37:05 PM
Report ID: 1009780 - 9047949

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ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: G BROWN

Collection ID/Chain #: 371574

Location Desc: 215 S BROADWAY

Lab ID: 1278260	Matrix: Drinking Water
Sample ID: Replacement for 1255176	Date Collected: 11/25/2019 14:32
Description DS1	Date Received: 11/26/2019 10:47

Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
Sample Type	RT										
Sampling Point	RTOR										

Analysis Desc: SM 9223-B

Preparation Method: Microbiology

Analytical Method: SM 9223-B

Total Coliform via P/A	Absent			1		11/26/2019 11:09	DV	11/27/2019 08:18	MAH
E. coli via P/A	Absent			1		11/26/2019 11:09	DV	11/27/2019 08:18	MAH

Analysis Desc: N/A

Analytical Method: N/A

Total Chlorine Residual	2.0			1				11/27/2019 10:48	EIE
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Report Date: Wednesday, November 27, 2019 5:49:47 PM

Report ID: 1011260 - 9059495

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ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: G BROWN
Collection ID/Chain #: 369757

Location Desc: 29146 S RODGERS

Lab ID: 1270818	Matrix: Drinking Water
Sample ID: 150417	Date Collected: 12/5/2019 09:00
Description: DS1	Date Received: 12/5/2019 11:29

Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
Sample Type	RT										
Sampling Point	RTOR										

Analysis Desc: SM 9223-B		Preparation Method: Microbiology									
		Analytical Method: SM 9223-B									
Total Coliform via P/A	Absent			1		12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
E. coli via P/A	Absent			1		12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
Analysis Desc: N/A		Analytical Method: N/A									
Total Chlorine Residual	1.5			1				12/6/2019 10:25	EIE		

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Topeka, KS 66620
Phone (785) 296-1620
Fax (785) 559-5205

ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: G BROWN

Collection ID/Chain #: 369758

Location Desc: 1501 AMITY

Lab ID:	1270819	Matrix:	Drinking Water								
Sample ID:	150417-2	Date Collected:	12/5/2019 09:13								
Description:	DS1	Date Received:	12/5/2019 11:29								
Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
Sample Type	RT										
Sampling Point	RTOR										
Analysis Desc: SM 9223-B		Preparation Method: Microbiology									
		Analytical Method: SM 9223-B									
Total Coliform via P/A	Absent			1		12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
E. coli via P/A	Absent			1		12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
Analysis Desc: N/A		Analytical Method: N/A									
Total Chlorine Residual	1.8			1				12/6/2019 10:25	EIE		

Report Date: Friday, December 06, 2019 11:50:25 AM
Report ID: 1014153 - 9090701

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Phone (785) 296-1620
Fax (785) 559-5205

ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: G BROWN

Collection ID/Chain #: 369759

Location Desc: 302 N 14TH

Lab ID:	1270820	Matrix:	Drinking Water								
Sample ID:	150417	Date Collected:	12/5/2019 09:25								
Description	DS1	Date Received:	12/5/2019 11:29								
Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
Sample Type	RT										
Sampling Point	RTOR										
Analysis Desc SM 9223-B		Preparation Method Microbiology									
		Analytical Method SM 9223-B									
Total Coliform via P/A	Absent					12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
E. coli via P/A	Absent					12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
Analysis Desc N/A		Analytical Method N/A									
Total Chlorine Residual	1.3							12/6/2019 10:25	EIE		

Report Date: Friday, December 06, 2019 11:50:25 AM
Report ID: 1014154 - 9090702

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Kansas Health & Environmental Laboratories
6810 SE Dwight Street
Topeka, KS 66620
Phone (785) 296-1620
Fax (785) 559-5205

ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: G BROWN

Collection ID/Chain #: 369760

Location Desc: 215 S BROADWAY

Lab ID: 1270821
Sample ID: 150417
Description: DS1

Matrix: Drinking Water
Date Collected: 12/5/2019 09:41
Date Received: 12/5/2019 11:29

Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
Sample Type	RT										
Sampling Point	RTOR										
Analysis Desc SM 9223-B		Preparation Method Microbiology									
		Analytical Method SM 9223-B									
Total Coliform via P/A	Absent			1		12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
E. coli via P/A	Absent			1		12/5/2019 14:16	DV	12/6/2019 09:55	MAH		
Analysis Desc N/A		Analytical Method N/A									
Total Chlorine Residual	1.6			1				12/6/2019 10:25	EIE		

Report Date: Friday, December 06, 2019 11:50:34 AM
Report ID: 1014155 - 9090703

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General Service Connection Flushing Procedures

October 2018

1. Flushing a service connection should not be started until after the water main serving the service connection has been thoroughly flushed by the public water supply system's operating staff.
2. Once the waterline/water main has been thoroughly flushed, begin the process of flushing the service connection by locating the outside spigot/faucet that is closest to the water main.
3. Run the water with the outside spigot/faucet open for at least 10-15 minutes to flush the service line. Lengthy or complex service lines may require flushing for more than 10-15 minutes.
4. A hose may be attached to the outside spigot/faucet to redirect the water to avoid ponding. In doing so, make sure the flow is high and nothing is attached to the end of the hose. Additional flushing time may be necessary to compensate for any restrictions imposed by the attached hose.
5. Wait 30 – 60 minutes without using any water, if possible, to allow the water in the water main to settle.
6. Open the outside spigot/faucet again and check water clarity.
7. If necessary, flush the service line through the outside spigot/faucet for another 10-15 minutes. Depending on the flushing of the water main, it may be necessary to repeat the flushing of the service line checking water clarity each time.
8. After the water from the outside spigot/faucet appears clear, begin the general process of flushing the service connection's interior pipes and faucets.
9. If possible, begin flushing at a cold water faucet that is both on the lowest level of the service connection's structure and closest to its water meter.
10. Fully open each cold water faucet one at a time and run for at least five minutes. Prior to flushing remove all faucet attachments such as aerators, screens, etc. to maximum flow.
11. Flush remaining cold water faucets moving upwardly in the service connection's structure and away from its water meter. Be sure to include tubs and showers.
12. Individually open each remaining outside spigot/faucet and similarly flush as above.
13. Flush hot water heaters according to the manufacturer's instructions for flushing. Disconnect power to the hot water heater at the circuit breaker box and allow the hot water heater to sufficiently cool before flushing to avoid being burned. Begin flushing hot water taps on the lowest level of the service connection's structure. Individually open the hot water faucets and run until the warm water turns to cold water. Restore power to the hot water heater once all hot water faucets have been thoroughly flushed.
14. Flush items such as in-line filters, treatment systems, water softeners, refrigerator water dispensers (direct or tanked) with enough water to replace at least 1-2 volumes of all connecting lines and tanks. To avoid contamination, consider replacing all filters, especially if they are at the end of their useful service life.
15. Refer to owner's manuals for flushing water softening systems, reverse osmosis systems, and other types of filtering systems. To avoid contamination, consider replacing all filters, especially if they are at the end of their useful service life.
16. Other items that utilize water such as coffee makers, pitcher type water filters, and dental cleaning appliances should be cleaned and their filters replaced.
17. If water from taps is not clear, repeat steps 2 through
18. 16. Once flushing has been completed, verify that all spigots and faucets are closed.

Please contact your public water supply system if you have questions.

ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
Louisburg, City of
215 S Broadway
Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: Gregg Brown
Collection ID/Chain #: 365942

Location Code: LRAA1
Location Desc: 30013 SPRING VALLEY

Lab ID: 1278220	Matrix: Drinking Water
Sample ID: 23658	Date Collected: 11/20/2019 11:47
Description: DS1 DISTRIBUTION	Date Received: 11/21/2019 10:51

Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
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Sample Type RT
Sampling Point LRAA1

Haloacetic Acids

Analysis Desc: EPA 552.2		Analytical Method: EPA 552.2									
Monochloroacetic Acid	<2.0	ug/L	2.0	1				12/5/2019 01:03	JWC		
Monobromoacetic Acid	<0.50	ug/L	0.50	1				12/5/2019 01:03	JWC		
Dichloroacetic Acid	6.6	ug/L	0.50	1				12/5/2019 01:03	JWC		
Trichloroacetic Acid	2.4	ug/L	0.50	1				12/5/2019 01:03	JWC		
Dibromoacetic Acid	2.4	ug/L	0.50	1				12/5/2019 01:03	JWC		
Total Haloacetic Acids	11	ug/L	2.0	1				12/5/2019 01:03	JWC		
Surrogate (S)								12/5/2019 01:03	JWC		

Analysis Desc: EPA 524 2THM		Preparation Method: EPA 524 2THM									
Analytical Method: EPA 524 2THM											
Chloroform	9.2	ug/L	0.50	1		11/28/2019 07:53	DT	11/28/2019 07:53	DT		
Bromodichloromethane (THM)	9.1	ug/L	0.50	1		11/28/2019 07:53	DT	11/28/2019 07:53	DT		
Dibromochloromethane (THM)	8.1	ug/L	0.50	1		11/28/2019 07:53	DT	11/28/2019 07:53	DT		
Bromoform (THM)	1.5	ug/L	0.50	1		11/28/2019 07:53	DT	11/28/2019 07:53	DT		
Total Trihalomethane	28	ug/L	2.0	1		11/28/2019 07:53	DT	11/28/2019 07:53	DT		80

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ANALYTICAL RESULTS

Submitter: Louisburg, City of
Report to: Craig Hufferd
 Louisburg, City of
 215 S Broadway
 Louisburg, KS 66053

Client ID: KS2012106
State ID: O3000

Collector: Gregg Brown
Collection ID/Chain #: 365943

Location Code: LRAA2
Location Desc: 202 AQUATIC DR

Lab ID: 1278221 **Matrix:** Drinking Water
Sample ID: 23658 **Date Collected:** 11/20/2019 11:10
Description: DS1 DISTRIBUTION **Date Received:** 11/21/2019 10:51

Parameters	Results	Units	RDL	DF	Uncertainty	Prep	By	Analyzed	By	Qual	RegLmt
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Sample Type RT
Sampling Point LRAA2

Haloacetic Acids

Analysis Desc	EPA 552.2	Analytical Method		EPA 552.2				
Monochloroacetic Acid	<2.0	ug/L	2.0	1			12/4/2019 23:59	JWC
Monobromoacetic Acid	<0.50	ug/L	0.50	1			12/4/2019 23:59	JWC
Dichloroacetic Acid	7.3	ug/L	0.50	1			12/4/2019 23:59	JWC
Trichloroacetic Acid	3.1	ug/L	0.50	1			12/4/2019 23:59	JWC
Dibromoacetic Acid	2.6	ug/L	0.50	1			12/4/2019 23:59	JWC
Total Haloacetic Acids	13	ug/L	2.0	1			12/4/2019 23:59	JWC
Surrogate (S)							12/4/2019 23:59	JWC

Analysis Desc	EPA 524.2THM	Preparation Method		EPA 524.2THM				
				Analytical Method EPA 524.2THM				
Chloroform	11	ug/L	0.50	1	11/28/2019 08:15	DT	11/28/2019 08:15	DT
Bromodichloromethane (THM)	9.0	ug/L	0.50	1	11/28/2019 08:15	DT	11/28/2019 08:15	DT
Dibromochloromethane (THM)	7.8	ug/L	0.50	1	11/28/2019 08:15	DT	11/28/2019 08:15	DT
Bromoform (THM)	1.5	ug/L	0.50	1	11/28/2019 08:15	DT	11/28/2019 08:15	DT
Total Trihalomethane	29	ug/L	2.0	1	11/28/2019 08:15	DT	11/28/2019 08:15	DT

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