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February 8, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of January, 2019.

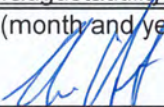
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026	On February 4 Triangle station was converted to a new Allen Bradley control system on a new HMI. The level sensors for both Calciquest and sodium hypochlorite need tuning. The new control system will provide additional chemical dosing measurement tools.	
Reporting period (month and year):		January - 19	
Signature: 		2/8/2019	

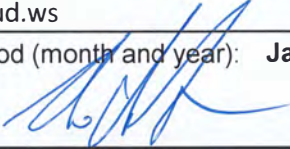
Water production, pH and free chlorine residual							Chemical usage					
Triangle Station			Riverside Station				Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH		Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	0.62	7.17	1.18	0.59	7.64	1.20	1	8		1.5	7	
2	1.16	7.17	1.17	0.59	7.64	1.19	3	15		1.4	7	
3	0.97	7.16	1.24	0.59	7.64	1.19	2	12		1.4	7	
4	0.98	7.15	1.28	0.58	7.64	1.28	2	12		1.4	7	
5	0.94	7.13	1.29	0.61	7.64	1.39	0	12		1.5	7	
6	0.85	7.13	1.29	0.55	7.64	1.39	2	11		1.3	7	
7	0.89	7.16	1.18	0.60	7.64	1.35	5	12		1.4	7	
8	1.03	7.18	1.18	0.61	7.64	1.31	2	14		1.5	7	50
9	0.98	7.17	1.31	0.56	7.63	1.31	2	4		1.4	7	
10	1.20	7.16	1.32	0.69	7.63	1.32	2	1		1.6	8	
11	1.03	7.14	1.31	0.54	7.63	1.30	3	13	50	1.3	6	
12	0.91	7.11	1.31	0.00	7.62	1.23	0	11		1.4	6	
13	0.95	7.10	1.31	0.00	7.62	1.20	3	11		1.5	7	
14	0.99	7.10	1.30	0.00	7.62	1.20	5	12		1.5	7	
15	1.00	7.09	1.28	0.38	7.62	1.21	2	13		1.3	6	50
16	0.99	7.08	1.30	0.65	7.63	1.28	2	13	100	1.6	8	
17	1.70	7.05	1.31	0.80	7.63	1.28	3	21		1.8	9	50
18	0.95	7.05	1.31	0.64	7.64	1.26	3	6		1.5	7	
19	0.87	7.03	1.30	0.66	7.64	1.26	0	11		1.6	8	
20	0.61	7.02	1.29	0.51	7.64	1.25	3	8		1.2	6	
21	0.91	7.02	1.27	0.65	7.65	1.24	3	11		1.5	8	
22	0.25	7.02	1.16	0.52	7.65	1.24	1	4		1.3	6	
23	1.05	7.01	1.24	0.67	7.65	1.25	0	15		1.6	8	
24	0.93	7.00	1.29	0.88	7.66	1.24	1	12		2.0	10	
25	0.91	7.00	1.27	0.60	7.66	1.20	2	13	100	1.5	7	50
26	0.87	6.97	1.29	0.70	7.67	1.20	0	12		1.6	8	
27	0.73	6.96	1.33	0.75	7.67	1.19	2	10		1.8	9	
28	1.46	6.99	1.28	0.64	7.68	1.20	5	19		1.5	8	
29	1.25	6.97	1.29	0.61	7.68	1.22	3	15		1.4	7	
30	0.87	6.96	1.24	0.66	7.68	1.26	2	11		1.6	8	
31	1.03	6.95	1.25	0.56	7.69	1.27	3	14	100	1.3	7	
Summary	29.90	7.07	1.16	17.41	7.65	1.19	67	354	350	46	227	200
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used
(fluoride reported separately)

	Chemical Name	Purpose	Chemical Strength	Total	Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	113	gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	581	gallons
NaF	Sodium fluoride	fluoridation		550	pounds

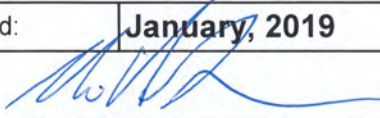
Summary of Total Coliform Bacteria Rule - please continue to submit complete results

Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.94

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME License #:	Brian Tarbuck 2026	Flow meter at RN2 HD-7 failed on 1/12 and was returned to reliable service on 1/15.	
btarbuck@gaud.ws			
Reporting period (month and year): January, 2019			
Signature 		February 8, 2019	

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.04	0.58	0.00	0.62		0.59	0.61	1.23
2	0.36	0.80	0.00	1.16		0.59	0.61	1.76
3	0.31	0.66	0.00	0.97		0.59	0.61	1.58
4	0.28	0.70	0.00	0.98		0.58	0.60	1.58
5	0.31	0.63	0.00	0.94		0.61	0.62	1.56
6	0.29	0.57	0.00	0.85		0.55	0.57	1.42
7	0.42	0.13	0.34	0.89		0.60	0.62	1.51
8	0.66	0.00	0.37	1.03		0.61	0.63	1.66
9	0.88	0.00	0.11	0.98		0.56	0.58	1.57
10	0.95	0.00	0.26	1.20		0.69	0.71	1.91
11	0.63	0.00	0.40	1.03		0.54	0.56	1.58
12	0.57	0.00	0.34	0.91		0.00	0.61	1.52
13	0.59	0.00	0.36	0.95	Well HD-8 locked and tagged out of service until spring, 2019.	0.00	0.63	1.58
14	0.64	0.00	0.36	0.99		0.00	0.69	1.68
15	0.65	0.00	0.36	1.00		0.38	0.54	1.54
16	0.61	0.00	0.38	0.99		0.65	0.67	1.66
17	0.79	0.50	0.42	1.70		0.80	0.82	2.53
18	0.61	0.00	0.34	0.95		0.64	0.66	1.61
19	0.62	0.00	0.25	0.87		0.66	0.68	1.55
20	0.54	0.00	0.07	0.61		0.51	0.53	1.14
21	0.68	0.00	0.23	0.91		0.65	0.67	1.58
22	0.20	0.00	0.05	0.25		0.52	0.54	0.79
23	0.21	0.84	0.00	1.05		0.67	0.69	1.74
24	0.25	0.68	0.00	0.93		0.88	0.91	1.84
25	0.26	0.65	0.00	0.91		0.60	0.62	1.53
26	0.19	0.68	0.00	0.87		0.70	0.72	1.59
27	0.00	0.73	0.00	0.73		0.75	0.78	1.51
28	0.58	0.88	0.00	1.46		0.64	0.66	2.12
29	0.40	0.85	0.00	1.25		0.61	0.63	1.88
30	0.24	0.63	0.00	0.87		0.66	0.68	1.55
31	0.21	0.82	0.00	1.03		0.56	0.57	1.60
Sum	13.94	11.33	4.63	29.90	0.00	17.41	20.00	49.90

Percent Triangle 60%
Percent Riverside 40%

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Triangle Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080			
Reporting period:	January, 2019	Notes: See notes below for specific operating conditions.	
Signature: 	2/8/2019	Date	GAUD mg/L
		1/8/2019 11:25	0.71
		Location	HETL mg/L
		Triangle Station	0.7

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.62	20	0.71	0.59
2	1.16	38	0.74	0.60
3	0.97	31	0.76	0.58
4	0.98	33	0.76	0.61
5	0.94	30	0.79	0.58
6	0.85	28	0.78	0.60
7	0.89	31	0.76	0.64
8	1.03	34	0.75	0.60
9	0.98	32	0.73	0.59
10	1.20	42	0.75	0.64
11	1.03	32	0.76	0.57
12	0.91	30	0.79	0.60
13	0.95	31	0.78	0.59
14	0.99	33	0.74	0.61
15	1.00	33	0.75	0.60
16	0.99	29	0.70	0.52
17	1.70	53	0.71	0.56
18	0.95	31	0.76	0.60
19	0.87	29	0.71	0.60
20	0.61	21	0.70	0.62
21	0.91	29	0.66	0.58
22	0.25	6	0.63	0.43
23	1.05	37	0.66	0.64
24	0.93	29	0.65	0.57
25	0.91	27	0.66	0.54
26	0.87	29	0.71	0.61
27	0.73	25	0.70	0.62
28	1.46	51	0.65	0.62
29	1.25	41	0.64	0.59
30	0.87	28	0.65	0.59
31	1.03	31	0.70	0.55
Avg	0.96	31.68	0.72	0.59
Min	0.25	6.06	0.63	0.43
Max	1.70	52.59	0.79	0.64
Total	29.90	982.05		

Operating comments

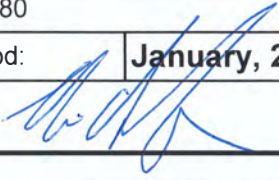
Monthly Fluoride Report

System Type - Fluoride Systems

System Name: Greater Augusta Utility District

PWSID#: 90080

Reporting period: January, 2019

Signature:  2/8/2018

System Information

Treatment plant: Riverside Station

Chemical Used: Sodium Fluoride

Notes: See notes below for specific operating conditions.

Date	GAUD mg/L	Location	HETL mg/L
1/8/2019 9:50	0.56	Riverside Station	0.6

Fluoride

Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.59	22	0.89	0.67
2	0.59	23	0.81	0.70
3	0.59	22	0.74	0.67
4	0.58	23	0.73	0.71
5	0.61	22	0.73	0.65
6	0.55	22	0.70	0.72
7	0.60	23	0.68	0.69
8	0.61	22	0.67	0.65
9	0.56	22	0.80	0.70
10	0.69	28	0.80	0.73
11	0.54	21	0.73	0.70
12	0.61	23	0.69	0.68
13	0.63	25	0.68	0.72
14	0.69	26	0.67	0.68
15	0.54	18	0.62	0.60
16	0.65	26	0.71	0.72
17	0.80	24	0.61	0.54
18	0.64	25	0.73	0.70
19	0.66	26	0.74	0.71
20	0.51	21	0.73	0.74
21	0.65	26	0.72	0.72
22	0.52	20	0.72	0.69
23	0.67	27	0.71	0.73
24	0.88	36	0.70	0.73
25	0.60	3	0.41	0.09
26	0.70	0	0.11	0.00
27	0.75	0	0.12	0.00
28	0.64	0	0.12	0.00
29	0.61	0	0.12	0.00
30	0.66	17	0.42	0.46
31	0.56	23	0.76	0.75
Avg	0.63	19.87	0.62	0.58
Min	0.51	0.00	0.11	0.00
Max	0.88	36.00	0.89	0.75
Total	19.48	616.00		

Operating comments

Individual well flow meter failed; flow from common flow meter at station for these dates.

Fluoridation system taken out of service for maintenance.

System returned to reliable service.

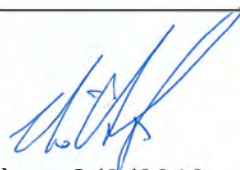
Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: January, 2019

Reporting date: 2/8/2019



Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
1	278	1.60	0.0	
2	92,240	1.21	0.4	
3	83,960	1.37	0.5	
4	80,740	1.69	0.5	
5	76,200	1.84	0.4	
6	0	1.94	-	no consumption
7	84,770	1.76	0.5	
8	85,160	1.74	0.5	
9	84,220	1.77	0.4	
10	84,490	1.74	0.4	
11	79,550	1.83	0.4	
12	72,190	1.88	0.3	
13	0	1.84	-	no consumption
14	146,650	1.66	0.7	
15	77,010	1.71	0.3	
16	80,890	1.76	0.4	
17	83,960	1.73	0.3	
18	83,950	1.78	0.4	
19	72,860	1.70	0.3	
20	0	1.80	-	no consumption
21	70,190	1.72	0.3	
22	83,020	1.69	0.3	
23	90,510	1.57	0.4	
24	88,900	1.59	0.4	
25	85,960	1.63	0.4	
26	75,400	1.70	0.3	
27	71,260	1.69	0.3	
28	81,020	1.64	0.3	
29	83,550	1.68	0.3	
30	80,220	1.63	0.3	
Sum	2,179,148		10.0	
Average	72,638	1.7	0.3	
Max		1.9		

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March 8, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of February, 2019.

Note that the so-called MainEx well (southerly well at Riverside Drive) is still locked and tagged out of service until the snow recedes and we can bring it back online to retest it.

We changed out our 15 year old programmable logic controllers (PLCs) and Lookout Human Machine Interface (HMI) software at Triangle Station to state of the art Allen Bradley PLCs that integrate into our existing Rockwell iFix HMI at the wastewater treatment plant. That project went smoothly apart from not storing the metered water flow data from the sodium fluoride upflow saturators in the "historian" part of the HMI. We check the readings on site each day so you're seeing the flow indicated by the meter when the operator was at the station. Until that is working properly we'll continue to rely on the continuous fluoride analyzer for primary compliance.

You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name	Brian Tarbuck	March 5 was the first full day operating on new PLCs at Triangle. Some data didn't record as expected so grab samples were substituted. No operational problems resulted from the new PLCs. Triangle pH meter repaired on 3/11.	
and ME License #:	2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period (month and year):	February - 19		
Signature:		3/9/2019	

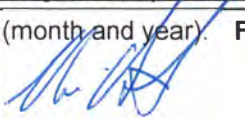
Water production, pH and free chlorine residual							Chemical usage					
Triangle Station			Riverside Station				Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH		Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	0.99	6.94	1.19	0.68	7.69		2	12		1.6	8	
2	0.91	6.93	1.12	0.65	7.70		-1	11		1.6	8	
3	0.84	6.92	1.11	0.61	7.70		2	11		1.4	7	
4	0.36	6.95	0.43	0.62	7.70		2	2		1.5	7	
5	1.08	6.97	1.01	0.68	7.70		0	14		1.6	7	
6	0.92	6.96	1.16	0.63	7.70		2	12		1.5	7	
7	0.97	6.96	1.21	0.66	7.70		1	12	50	1.6	7	
8	0.97	6.95	1.31	0.58	7.70		1	14		1.3	6	
9	0.95	6.91	1.22	0.59	7.70		0	13		1.4	6	
10	0.92	6.91	1.23	0.59	7.70		3	12		1.4	6	
11	0.89	7.25	1.31	0.57	7.69		5	6	100	1.4	6	50
12	1.74	7.34	1.37	0.80	7.69		3	22		1.8	7	
13	0.90	7.35	1.37	0.64	7.69		2	14		1.5	6	
14	0.21	7.36	1.29	0.37	7.68		1	2	100	0.9	4	
15	1.07	7.34	1.37	0.63	7.69		1	14		1.5	6	50
16	0.90	7.33	1.36	0.61	7.68		-1	11		1.4	6	
17	0.90	7.33	1.37	0.55	7.68		3	12		1.4	5	
18	0.93	7.33	1.35	0.62	7.68		5	13		1.4	6	
19	1.00	7.32	1.35	0.53	7.68		2	14		1.3	5	
20	1.05	7.31	1.38	0.63	7.67		2	14		1.5	5	50
21	0.93	7.31	1.38	0.58	7.67		1	14		1.4	5	
22	1.01	7.31	1.35	0.63	7.67		2	14		1.5	5	50
23	1.00	7.29	1.33	0.56	7.67		0	14		1.3	5	
24	0.87	7.29	1.30	0.62	7.67		3	11		1.5	5	
25	0.97	7.31	1.31	0.67	7.67		5	13	50	1.5	6	
26	1.01	7.33	1.33	0.56	7.67		2	14		1.3	5	
27	1.05	7.32	1.33	0.68	7.67		3	14		1.6	6	
28	1.00	7.31	1.37	0.61	7.67		2	13		1.5	5	
Summary	26.36	7.18	0.43	17.15	7.69	0.80	53	341	300	41	167	200
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used
(fluoride reported separately)

	Chemical Name	Purpose	Chemical Strength	Total	Units
Calc	Calquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	93	gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	508	gallons
NaF	Sodium fluoride	fluoridation		500	pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results

Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.90

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME License #:	Brian Tarbuck 2026	Triangle station switched to a new PLC system and HMI on March 4.	
btarbuck@greteraugustautilitydistrict.org			
Reporting period (month and year): February, 2019			
Signature: 			

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.17	0.82	0.00	0.99	0.00	0.68	0.68	1.66
2	0.27	0.64	0.00	0.91	0.00	0.65	0.65	1.56
3	0.18	0.66	0.00	0.84	0.00	0.61	0.61	1.44
4	0.36	0.00	0.00	0.36	0.00	0.62	0.62	0.99
5	0.53	0.50	0.05	1.08	0.00	0.68	0.68	1.76
6	0.54	0.38	0.00	0.92	0.00	0.63	0.63	1.56
7	0.60	0.37	0.00	0.97	0.00	0.66	0.66	1.63
8	0.65	0.31	0.00	0.97	0.00	0.58	0.58	1.55
9	0.70	0.24	0.00	0.95	0.00	0.59	0.59	1.55
10	0.58	0.34	0.00	0.92	0.00	0.59	0.59	1.51
11	0.37	0.52	0.00	0.89	0.00	0.57	0.57	1.47
12	0.45	0.67	0.62	1.74	0.00	0.80	0.80	2.54
13	0.00	0.53	0.37	0.90	0.00	0.64	0.64	1.54
14	0.00	0.21	0.00	0.21	0.00	0.37	0.37	0.58
15	0.31	0.76	0.00	1.07	0.00	0.63	0.63	1.70
16	0.30	0.59	0.00	0.90	0.00	0.61	0.61	1.51
17	0.29	0.61	0.00	0.90	0.00	0.55	0.55	1.45
18	0.34	0.59	0.00	0.93	0.00	0.62	0.62	1.55
19	0.58	0.05	0.37	1.00	0.00	0.53	0.53	1.53
20	0.63	0.00	0.42	1.05	0.00	0.63	0.63	1.69
21	0.55	0.00	0.38	0.93	0.00	0.58	0.58	1.51
22	0.58	0.00	0.43	1.01	0.00	0.63	0.63	1.64
23	0.68	0.00	0.32	1.00	0.00	0.56	0.56	1.56
24	0.53	0.00	0.34	0.87	0.00	0.62	0.62	1.49
25	0.38	0.29	0.30	0.97	0.00	0.67	0.67	1.64
26	0.00	0.57	0.44	1.01	0.00	0.56	0.56	1.57
27	0.00	0.61	0.44	1.05	0.00	0.68	0.68	1.73
28	0.00	0.54	0.46	1.00	0.00	0.61	0.61	1.61
Sum	10.59	10.81	4.95	26.36	0.00	17.15	17.15	43.51

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Triangle Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period:	February, 2019	Date	GAUD mg/L
Signature: 	3/8/2019	2/12/2019 12:15	0.76
		Location	HETL mg/L
		Triangle Station	0.8

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.99	36	0.71	0.66
2	0.91	29	0.75	0.58
3	0.84	28	0.74	0.61
4	0.36	32	0.80	1.58
5	1.08	20	0.71	0.33
6	0.92	53	0.77	1.03
7	0.97	40	0.79	0.74
8	0.97	37	0.77	0.69
9	0.95		0.78	
10	0.92		0.77	
11	0.89	36	0.74	0.72
12	1.74	52	0.76	0.54
13	0.90	51	0.75	1.02
14	0.21	1	0.75	0.08
15	1.07	45	0.77	0.76
16	0.90		0.82	
17	0.90		0.82	
18	0.93		0.77	
19	1.00	35	0.78	0.64
20	1.05	40	0.80	0.68
21	0.93	38	0.80	0.74
22	1.01	39	0.80	0.69
23	1.00		0.84	
24	0.87		0.83	
25	0.97	42	0.78	0.78
26	1.01	23	0.78	0.41
27	1.05	42	0.74	0.72
28	1.00	39	0.73	0.70
Avg	0.94	36.14	0.77	0.70
Min	0.21	1.00	0.71	0.08
Max	1.74	53.00	0.84	1.58
Total	26.36	758.92		

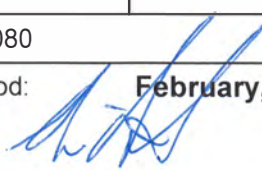
Operating comments

New PLC's reporting starting 3/4/2019

Using daily readings; makeup water not on historical trending due to new PLC.

Using daily readings; makeup water not on historical trending due to new PLC.

Using daily readings; makeup water not on historical trending due to new PLC.

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: <u>Riverside Station</u>	
System Name:	Greater Augusta Utility District	Chemical Used: <u>Sodium Fluoride</u>	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period: <u>February, 2019</u>		Date	GAUD mg/L
Signature: 		2/12/2019 8:10	0.80
3/8/2019		Location	HETL mg/L
		Riverside Station	0.8

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.68	27	0.76	0.72
2	0.65	27	0.75	0.75
3	0.61	24	0.75	0.71
4	0.62	25	0.73	0.72
5	0.68	27	0.73	0.72
6	0.63	25	0.72	0.71
7	0.66	26	0.69	0.71
8	0.58	24	0.67	0.74
9	0.59	23	0.60	0.70
10	0.59	23	0.54	0.70
11	0.57	21	0.57	0.66
12	0.80	33	0.76	0.74
13	0.64	25	0.74	0.70
14	0.37	14	0.73	0.69
15	0.63	23	0.74	0.66
16	0.61	25	0.78	0.74
17	0.55	22	0.78	0.72
18	0.62	25	0.77	0.72
19	0.53	21	0.76	0.72
20	0.63	23	0.77	0.65
21	0.58	15	0.65	0.46
22	0.63	4	0.37	0.11
23	0.56	0	0.14	0.00
24	0.62	0	0.12	0.00
25	0.67	0	0.12	0.00
26	0.56	0	0.12	0.00
27	0.68	0	0.12	0.00
28	0.61	24	0.57	0.71
Avg	0.61	18.79	0.59	0.55
Min	0.37	0.00	0.12	0.00
Max	0.80	33.00	0.78	0.75
Total	17.15	526.00		

Operating comments

Fluoridation system removed from service for maintenance.

Fluoridation system returned to service.

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: February, 2019

Reporting date: 3/8/2019

Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
1	81,550	1.64	0.3	
2	73,400	1.63	0.3	
3	71,520	1.61	0.3	
4	76,870	1.60	0.3	
5	72,730	1.60	0.3	
6	80,880	1.63	0.4	
7	84,230	1.60	0.3	
8	75,930	1.56	0.3	
9	0	1.62	-	no consumption
10	73,260	1.56	0.3	
11	80,490	1.52	0.4	
12	86,360	1.49	0.3	
13	78,070	1.60	0.3	
14	76,210	1.60	0.4	
15	76,740	1.50	0.3	
16	0	1.42	-	no consumption
17	71,920	1.46	0.3	
18	68,850	1.51	0.3	
19	71,920	1.54	0.3	
20	71,390	1.58	0.3	
21	71,800	1.45	0.3	
22	72,730	1.42	0.3	
23	0	1.45	-	no consumption
24	73,790	1.41	0.3	
25	81,680	1.42	0.3	
26	81,430	1.46	0.4	
27	80,210	1.49	0.4	
28	77,800	1.49	0.3	
Sum	1,911,760		8.0	
Average	68,277	1.5	0.3	
Max		1.6		

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Charlotte Warren, Hallowell voting member
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April 10, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of March, 2019.

Note that the so-called MainEx well (southerly well at Riverside Drive) is still locked and tagged out of service until the snow recedes and we can bring it back online to retest it.

We had a couple of data outages in March. When the data can't get from the well station to the computers at the wastewater treatment plant we have no historical record of water quality information. We're looking into other data aggregation systems that can harvest data locally and also allow it to be transmitted. This would avoid those very rare occasions when the communications systems fail.

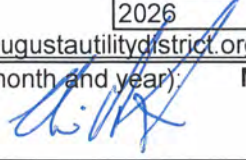
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

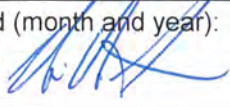
Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name	Brian Tarbuck	On March 10 at 10:30 AM weather event caused the internet connections at Riverside & Triangle to fail causing suspension of data transfer. No electronic data was recorded until comms were restored on March 12 at 8:45 AM.	
and ME License #:	2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period (month and year):	March - 19		
Signature:		4/8/2019	

	Water production, pH and free chlorine residual						Chemical usage					
	Triangle Station			Riverside Station			Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH	Average free chlorine residual	Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.01	7.31	1.38	0.57	7.67	0.82	2	14	50	1.3	4.9	
2	1.00	7.29	1.40	0.57	7.67	0.83	0	14		1.4	5.0	
3	0.93	7.29	1.35	0.63	7.67	0.83	3	11		1.4	5.3	
4	0.91	7.30	1.38	0.67	7.67	0.83	5	12		1.6	5.7	
5	1.05	7.38	1.35	0.55	7.67	0.89	2	14		1.2	5.0	
6	0.96	7.46	1.31	0.46	7.66	0.91	2	13		1.1	4.6	
7	0.92	7.45	1.30	0.84	7.67	0.90	3	14		1.9	8.1	
8	1.08	7.45	1.33	0.61	7.67	0.90	2	15		1.5	6.2	
9	0.90	7.44	1.35	0.62	7.67	0.90	-1	11		1.5	6.2	
10	0.89	7.43	1.30	0.08	7.67	0.89				0.2	1.1	
11	0.46	7.47	1.47		7.67	0.81						
12	0.46	7.46	1.36		7.67	0.84	5	12				
13	1.09	7.49	1.33	0.66	7.66	0.89	3	14		1.5	6.6	
14	1.04	7.47	1.33	0.63	7.67	0.89	2	14		1.5	6.4	
15	0.98	7.46	1.34	0.63	7.67	0.88	2	13	50	1.5	6.3	
16	0.94	7.45	1.34	0.58	7.67	0.87	0	11		1.4	5.8	
17	0.93	7.44	1.35	0.65	7.67	0.86	3	12		1.5	6.5	
18	1.06	7.45	1.32	0.54	7.67	0.88	5	15	50	1.3	5.5	
19	1.06	7.45	1.26	0.60	7.67	0.88	2	13		1.4	6.1	
20	1.02	7.44	1.26	0.63	7.67	0.87	2	14		1.4	6.4	
21	1.05	7.44	1.25	0.56	7.68	0.87	2	14	50	1.3	5.7	
22	0.91	7.44	1.25	0.63	7.68	0.87	2	12		1.5	6.3	
23	0.79	7.42	1.26	0.61	7.68	0.86	0	10		1.4	6.0	
24	0.96	7.42	1.26	0.58	7.68	0.87	3	13		1.4	5.8	
25	0.98	7.43	1.24	0.56	7.68	0.87	4	14	100	1.3	5.7	
26	1.00	7.42	1.25	0.74	7.67	0.86	2	15		1.7	7.1	300
27	1.01	7.42	1.24	0.46	7.68	0.85	2	14		1.1	4.9	
28	0.92	7.42	1.22	0.61	7.68	0.91	2	26	50	1.4	6.2	
29	0.80	7.40	1.25	0.57	7.68	0.98	1	7		1.4	5.6	
30	0.06	7.38	1.26	0.62	7.68	0.95	3	0		1.4	5.8	
31	0.97	7.39	1.25	0.56	7.68	0.95	1	13		1.3	5.3	
Summary	28.13	7.42	1.22	17.01	7.67	0.81	62	375	350	40	166	300
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	102 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	542 gallons
NaF	Sodium fluoride	fluoridation		650 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.79

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME License #:	Brian Tarbuck 2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period (month and year): March, 2019			
Signature: 		April 8, 2019	

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.00	0.59	0.42	1.01	0.00	0.57	0.57	1.58
2	0.00	0.67	0.34	1.00	0.00	0.57	0.57	1.57
3	0.00	0.55	0.38	0.93	0.00	0.63	0.63	1.56
4	0.12	0.58	0.21	0.91	0.00	0.67	0.67	1.58
5	0.22	0.08	0.75	1.05	0.00	0.55	0.55	1.60
6	0.32	0.00	0.64	0.96	0.00	0.46	0.46	1.42
7	0.27	0.00	0.65	0.92	0.00	0.84	0.84	1.76
8	0.20	0.00	0.87	1.08	0.00	0.61	0.61	1.69
9	0.29	0.00	0.61	0.90	0.00	0.62	0.62	1.52
10	0.38	0.00	0.51	0.89	0.00	0.08	0.08	0.97
11	0.92	0.00	1.09	2.00	0.00			2.00
12	0.36	0.37	0.79	1.52	0.00			1.52
13	0.00	0.62	0.47	1.09	0.00	0.66	0.66	1.75
14	0.00	0.62	0.41	1.04	0.00	0.63	0.63	1.66
15	0.00	0.58	0.40	0.98	0.00	0.63	0.63	1.61
16	0.00	0.55	0.38	0.94	0.00	0.58	0.58	1.52
17	0.00	0.61	0.32	0.93	0.00	0.65	0.65	1.58
18	0.32	0.28	0.46	1.06	0.00	0.54	0.54	1.60
19	0.37	0.00	0.68	1.06	0.00	0.60	0.60	1.65
20	0.34	0.00	0.67	1.02	0.00	0.63	0.63	1.65
21	0.28	0.00	0.77	1.05	0.00	0.56	0.56	1.61
22	0.43	0.31	0.18	0.91	0.00	0.63	0.63	1.54
23	0.67	0.12	0.00	0.79	0.00	0.61	0.61	1.41
24	0.61	0.35	0.00	0.96	0.00	0.58	0.58	1.54
25	0.61	0.37	0.00	0.98	0.00	0.56	0.56	1.54
26	0.63	0.37	0.00	1.00	0.00	0.74	0.74	1.74
27	0.59	0.42	0.00	1.01	0.00	0.46	0.46	1.48
28	0.56	0.20	0.16	0.92	0.00	0.61	0.61	1.53
29	0.54	0.26	0.00	0.80	0.00	0.57	0.57	1.37
30	0.06	0.00	0.00	0.06	0.00	0.62	0.62	0.68
31	0.77	0.20	0.00	0.97	0.00	0.56	0.56	1.53
Sum	9.86	8.71	12.18	30.74	0.00	17.01	17.01	47.75

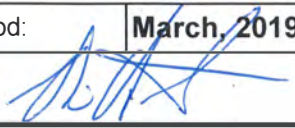
Average 1.54

Monthly Fluoride Report **System Type - Fluoride Systems**

System Name: **Greater Augusta Utility District**

PWSID#: 90080

Reporting period: **March, 2019**

Signature:  4/10/2019

System Information

Treatment plant: **Triangle Station**

Chemical Used: **Sodium Fluoride**

Notes: See notes below for specific operating conditions.

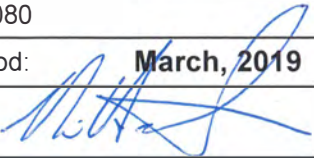
Date	GAUD mg/L	Location	HETL mg/L
3/11/2019 9:00	0.63	Triangle Station	0.6

Fluoride

Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	1.01	41	0.75	0.73
2	1.00	43	0.79	0.77
3	0.93	43	0.78	0.82
4	0.91	43	0.72	0.84
5	1.05	25	0.71	0.43
6	0.96	36	0.76	0.67
7	0.92	37	0.82	0.72
8	1.08	44	0.76	0.74
9	0.90	41	0.73	0.82
10	0.89	41	0.76	0.83
11	2.00	41	0.81	0.37
12	1.52	18	0.74	0.21
13	1.09	43	0.70	0.71
14	1.04	40	0.65	0.69
15	0.98	48	0.67	0.88
16	0.94	41	0.69	0.78
17	0.93	41	0.69	0.79
18	1.06	41	0.69	0.69
19	1.06	39	0.72	0.67
20	1.02	43	0.71	0.76
21	1.05	44	0.71	0.75
22	0.91	43	0.71	0.85
23	0.79	38	0.74	0.86
24	0.96	38	0.76	0.71
25	0.98	38	0.80	0.70
26	1.00	37	0.84	0.66
27	1.01	48	0.84	0.85
28	0.92	35	0.77	0.69
29	0.80	34	0.71	0.77
30	0.06	36	0.72	
31	0.97	36	0.71	0.66
Avg	0.99	39.14	0.74	0.71
Min	0.06	18.00	0.65	0.21
Max	2.00	48.00	0.84	0.88
Total	30.74	1,213.33		

Operating comments

SCADA issue / bad flow numbers

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: Riverside Station			
System Name: Greater Augusta Utility District		Chemical Used: Sodium Fluoride			
PWSID#: 90080		Notes: See notes below for specific operating conditions.			
Reporting period: March, 2019		Date	GAUD mg/L	Location	HETL mg/L
Signature:  4/10/2019		3/11/2019 8:20	0.69	Riverside Station	0.7

Fluoride					Operating comments	
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation		
units:	Mgals	gallons	mg/L	mg/L		
1	0.57	23	0.81	0.73		
2	0.57	22	0.80	0.70		
3	0.63	24	0.78	0.69		
4	0.67	26	0.78	0.70		
5	0.55	22	0.78	0.72		
6	0.46	17	0.78	0.67		
7	0.84	33	0.77	0.71		
8	0.61	25	0.76	0.74		
9	0.62	23	0.74	0.67		
10	0.08	0	0.75	0.00		Telemetry failures; local control fine; no data back to SCADA
11	0.00	0	0.75			
12	0.00	0	0.72			
13	0.66	25	0.69	0.68		
14	0.63	24	0.67	0.69		
15	0.63	25	0.70	0.71		
16	0.58	21	0.70	0.65		
17	0.65	25	0.62	0.69		
18	0.54	22	0.59	0.73		
19	0.60	25	0.58	0.75		
20	0.63	6	0.32	0.17		Fluoridation system offline for maintenance and routine cleaning.
21	0.56	0	0.14	0.00		
22	0.63	0	0.14	0.00		
23	0.61	0	0.15	0.00		
24	0.58	0	0.15	0.00		
25	0.56	0	0.15	0.00		
26	0.74	22	0.35	0.54		
27	0.46	19	0.56	0.74		
28	0.61	25	0.84	0.73		
29	0.57	23	0.81	0.73		
30	0.62	25	0.81	0.73		
31	0.56	22	0.79	0.70		
Avg	0.55	16.90	0.65	0.57		
Min	0.00	0.00	0.14	0.00		
Max	0.84	33.00	0.84	0.75		
Total	17.01	524.00				

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: March, 2019

Reporting date: 4/10/2019



Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
1	1,988,636	1.49	8.4	
2	0	1.57	-	no consumption
3	71,656	1.49	0.4	
4	76,875	1.47	0.3	
5	78,344	1.45	0.3	
6	78,070	1.44	0.4	
7	77,945	1.48	0.4	
8	79,680	1.48	0.4	
9	266	1.56	-	no consumption
10	69,781	1.43	0.3	
11	78,883	1.53	0.4	
12	81,281	1.58	0.4	
13	80,484	1.56	0.4	
14	78,875	1.48	0.4	
15	86,766	1.46	0.5	
16	133	1.50	-	no consumption
17	68,852	1.44	0.4	
18	81,547	1.46	0.4	
19	80,078	1.43	0.4	
20	78,344	1.48	0.4	
21	78,477	1.41	0.5	
22	77,945	1.35	0.4	
23	0	1.43	-	no consumption
24	71,656	1.35	0.4	
25	80,609	1.50	0.5	
26	82,891	1.57	0.4	
27	79,547	1.23	-	
28	75,664	0.97	0.5	
29	76,875	1.29	0.5	
30	46,391	1.36	0.2	
31	75,398	1.27	0.5	
Sum	3,981,949		18.5	
Average	128,450	1.4	0.6	
Max		1.6		

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Cary Colwell, Hallowell ex-officio member
ccolwell@greateraugustautilitydistrict.org

May 10, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of April, 2019.

Note that the so-called MainEx well (southerly well at Riverside Drive) is still locked and tagged out of service. We are looking at permanent sampling station options now to provide a more consistent means of sampling source water. Collecting water from the nearby blow-off hydrant for sampling purposes is not ideal.

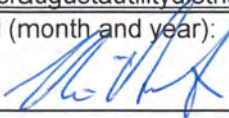
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

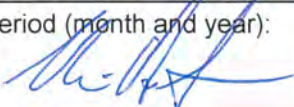
Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name: Greater Augusta Utility District		Community water system	
PWSID#: 90080		List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #: Brian Tarbuck 2026 btarbuck@greteraugustautilitydistrict.org			
Reporting period (month and year): April - 19			
Signature:  5/10/2019			

Water production, pH and free chlorine residual							Chemical usage					
Triangle Station			Riverside Station				Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH		Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.01	7.41	1.24	0.64	7.68	0.95	5	15	0	1.5	6	50
2	1.04	7.42	1.33	0.64	7.68	0.88	2	12	0	1.4	5	
3	1.04	7.41	1.43	0.55	7.68	0.87	2	14	0	1.3	5	
4	1.03	7.41	1.41	0.63	7.69	0.95	3	15	0	1.4	6	
5	1.03	7.40	1.36	0.68	7.69	0.96	2	16	50	1.5	6	
6	0.97	7.39	1.39	0.50	7.69	0.94	-1	12	0	1.2	5	
7	0.90	7.39	1.36	0.57	7.69	0.94	3	11	0	1.3	5	
8	0.98	7.39	1.35	0.59	7.69	0.94	5	14	50	1.3	5	
9	1.00	7.41	1.31	0.61	7.69	0.93	2	11	0	1.4	6	
10	1.02	7.42	1.31	0.50	7.69	0.91	2	12	50	1.2	5	50
11	1.01	7.43	1.27	0.68	7.69	0.76	2	14	0	1.6	6	
12	1.13	7.42	1.29	0.59	7.69	0.85	3	15	0	1.3	5	
13	0.93	7.39	1.27	0.62	7.69	0.81	-1	12	0	1.5	6	
14	0.88	7.39	1.28	0.60	7.69	0.78	3	12	0	1.3	5	
15	0.96	7.41	1.26	0.52	7.69	0.76	5	13	0	1.3	5	
16	1.01	7.39	1.27	0.63	7.69	0.84	1	14	50	1.4	6	
17	1.07	7.40	1.22	0.54	7.69	0.87	3	14	0	1.2	5	
18	1.03	7.41	1.26	0.59	7.69	0.87	3	13	0	1.4	5	
19	1.08	7.41	1.26	0.59	7.68	0.86	1	13	50	1.3	5	
20	0.85	7.40	1.29	0.55	7.68	0.84	0	10	0	1.3	5	
21	0.70	7.38	1.29	0.61	7.69	0.83	2	8	0	1.4	5	
22	1.05	7.39	1.27	0.63	7.69	0.81	5	14	0	1.4	6	
23	1.04	7.59	1.28	0.56	7.69	0.80	2	13	0	1.3	5	
24	0.99	7.71	1.27	0.63	7.69	0.79	2	13	0	1.4	6	
25	1.05	7.65	1.27	0.62	7.69	0.78	2	13	100	1.4	5	50
26	1.02	7.81	1.27	0.55	7.68	0.80	3	12	0	1.2	5	
27	0.90	7.84	1.28	0.60	7.68	0.82	-1	11	0	1.4	6	
28	0.93	7.83	1.28	0.56	7.68	0.79	3	13	0	1.3	5	
29	1.01	7.84	1.29	0.55	7.68	0.78	5	9	0	1.2	5	50
30	1.14	7.66	0.98	0.62	7.67	0.87	2	14	0	1.5	6	
Summary	29.79	7.49	0.98	17.75	7.69	0.76	68	382	350	41	163	200
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	109 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	545 gallons
NaF	Sodium fluoride	fluoridation		550 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.82

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period (month and year): April, 2019			
Signature: 		May 10, 2019	

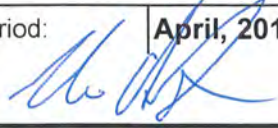
Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.13	0.49	0.40	1.01	0.00	0.64	0.64	1.66
2	0.00	0.64	0.41	1.04	0.00	0.64	0.64	1.69
3	0.00	0.64	0.41	1.04	0.00	0.55	0.55	1.59
4	0.00	0.58	0.45	1.03	0.00	0.63	0.63	1.66
5	0.00	0.59	0.44	1.03	0.00	0.68	0.68	1.71
6	0.00	0.65	0.33	0.97	0.00	0.50	0.50	1.47
7	0.00	0.56	0.34	0.90	0.00	0.57	0.57	1.47
8	0.00	0.44	0.55	0.98	0.00	0.59	0.59	1.57
9	0.27	0.00	0.73	1.00	0.00	0.61	0.61	1.61
10	0.33	0.00	0.69	1.02	0.00	0.50	0.50	1.52
11	0.51	0.00	0.50	1.01	0.00	0.68	0.68	1.69
12	0.38	0.00	0.75	1.13	0.00	0.59	0.59	1.72
13	0.27	0.00	0.66	0.93	0.00	0.62	0.62	1.55
14	0.14	0.00	0.74	0.88	0.00	0.60	0.60	1.48
15	0.32	0.00	0.64	0.96	0.00	0.52	0.52	1.48
16	0.30	0.00	0.71	1.01	0.00	0.63	0.63	1.64
17	0.37	0.01	0.70	1.07	0.00	0.54	0.54	1.61
18	0.33	0.00	0.69	1.03	0.00	0.59	0.59	1.61
19	0.37	0.00	0.71	1.08	0.00	0.59	0.59	1.66
20	0.26	0.00	0.58	0.85	0.00	0.55	0.55	1.40
21	0.00	0.00	0.70	0.70	0.00	0.61	0.61	1.30
22	0.14	0.00	0.90	1.05	0.00	0.63	0.63	1.67
23	0.50	0.33	0.20	1.04	0.00	0.56	0.56	1.60
24	0.69	0.30	0.00	0.99	0.00	0.63	0.63	1.62
25	0.69	0.36	0.00	1.05	0.00	0.62	0.62	1.67
26	0.69	0.33	0.00	1.02	0.00	0.55	0.55	1.57
27	0.71	0.18	0.00	0.90	0.00	0.60	0.60	1.50
28	0.62	0.31	0.00	0.93	0.00	0.56	0.56	1.48
29	0.08	0.52	0.41	1.01	0.00	0.55	0.55	1.56
30	0.00	0.60	0.54	1.14	0.00	0.62	0.62	1.76
Sum	8.10	7.52	14.18	29.79	0.00	17.75	17.75	47.54

63% Triangle
37% Riverside

MGD
0.99

MGD
0.59

MGD
1.58

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: Triangle Station			
System Name: Greater Augusta Utility District		Chemical Used: Sodium Fluoride			
PWSID#: 90080		Notes: See notes below for specific operating conditions.			
Reporting period: April, 2019		Date	GAUD mg/L	Location	HETL mg/L
Signature:  5/10/2019		4/10/2019 8:05	0.65	Triangle Station	0.7

Fluoride					Operating comments
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation	
units:	Mgals	gallons	mg/L	mg/L	
1	1.01	36	0.68	0.63	
2	1.04	46	0.68	0.79	
3	1.04	33	0.67	0.57	
4	1.03	39	0.67	0.68	
5	1.03	35	0.65	0.61	
6	0.97	38	0.67	0.70	
7	0.90	38	0.64	0.75	
8	0.98	38	0.61	0.69	
9	1.00	30	0.66	0.54	
10	1.02	39	0.66	0.69	
11	1.01	40	0.69	0.72	
12	1.13	45	0.75	0.72	
13	0.93	38	0.78	0.73	
14	0.88	38	0.77	0.78	
15	0.96	38	0.70	0.72	
16	1.01	38	0.71	0.68	
17	1.07	43	0.74	0.72	
18	1.03	41	0.76	0.72	
19	1.08	43	0.76	0.72	
20	0.85	39	0.81	0.82	
21	0.70	39	0.85	1.00	
22	1.05	39	0.80	0.66	
23	1.04	43	0.78	0.75	
24	0.99	39	0.74	0.71	
25	1.05	41	0.72	0.70	
26	1.02	35	0.72	0.62	
27	0.90	39	0.78	0.79	
28	0.93	39	0.80	0.76	
29	1.01	39	0.73	0.70	
30	1.14	40	0.72	0.63	
Avg	0.99	38.89	0.72	0.71	
Min	0.70	30.00	0.61	0.54	
Max	1.14	46.00	0.85	1.00	
Total	29.79	1,166.67			

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: <u>Riverside Station</u>			
System Name:	Greater Augusta Utility District	Chemical Used: <u>Sodium Fluoride</u>			
PWSID#: 90080		Notes: See notes below for specific operating conditions.			
Reporting period: <u>April, 2019</u>		Date	GAUD mg/L	Location	HETL mg/L
Signature:  5/10/2019		4/10/2019 10:15	0.80	Riverside Station	0.8

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.64	22	0.78	0.62
2	0.64	24	0.78	0.67
3	0.55	20	0.76	0.66
4	0.63	23	0.73	0.66
5	0.68	24	0.74	0.64
6	0.50	18	0.72	0.65
7	0.57	21	0.72	0.66
8	0.59	20	0.73	0.61
9	0.61	22	0.73	0.65
10	0.50	16	0.73	0.58
11	0.68	24	0.74	0.63
12	0.59	22	0.74	0.67
13	0.62	22	0.73	0.64
14	0.60	21	0.73	0.63
15	0.52	19	0.74	0.65
16	0.63	23	0.77	0.65
17	0.54	19	0.79	0.63
18	0.59	21	0.79	0.65
19	0.59	21	0.71	0.64
20	0.55	19	0.66	0.62
21	0.61	22	0.67	0.65
22	0.63	23	0.73	0.66
23	0.56	20	0.78	0.64
24	0.63	23	0.78	0.66
25	0.62	19	0.76	0.55
26	0.55	19	0.75	0.63
27	0.60	20	0.75	0.60
28	0.56	19	0.74	0.61
29	0.55	16	0.74	0.52
30	0.62	22	0.75	0.64
Avg	0.59	20.80	0.74	0.63
Min	0.50	16.00	0.66	0.52
Max	0.68	24.00	0.79	0.67
Total	17.75	624.00		

Operating comments

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: April, 2019

Reporting date: 5/10/2019

Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
1	81,289	1.28	0.5	
2	83,156	1.32	0.5	
3	82,883	1.18	0.6	
4	86,094	1.24	0.6	
5	154,414	1.22	1.1	
6	74,734	1.30	0.5	
7	75,133	1.28	0.5	
8	83,555	1.24	0.6	
9	84,758	1.32	0.6	
10	151,070	1.30	1.2	
11	89,438	0.93	0.7	
12	84,094	1.25	0.7	
13	76,203	1.23	0.6	
14	70,992	1.17	0.6	
15	80,211	1.08	0.6	
16	71,258	1.26	0.6	
17	76,203	1.27	0.6	
18	79,008	1.23	0.7	
19	82,492	1.24	0.6	
20	79,680	1.14	0.7	
21	78,609	1.15	0.7	
22	107,617	1.25	0.8	
23	143,984	1.20	1.3	
24	82,219	1.21	0.6	
25	81,016	1.20	0.7	
26	96,523	1.22	0.8	
27	0	1.34	-	no consumption
28	68,852	1.13	0.6	
29	81,414	1.24	0.7	
30	84,227	1.25	0.7	
Sum	2,571,125		20.0	
Average	85,704	1.2	0.7	
Max		1.3		

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btarbuck@greateraugustautilitydistrict.org

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Charlotte Warren, Hallowell voting member
cwarren@greateraugustautilitydistrict.org

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ccolwell@greateraugustautilitydistrict.org

June 7, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of May, 2019.

Note that the so-called MainEx well (southerly well at Riverside Drive) is still locked and tagged out of service. We have ordered a sampling station to install on the well and will keep the DWP notified as we move forward with our plans to return the well to service. For now, it remains out of service.

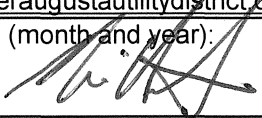
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026 btarbuck@greataugustautilitydistrict.org	Began reporting chemical feed flow based on chemical feed meters on February 8 at Triangle for Calciquest and sodium hypochlorite.	
Reporting period (month and year):	May - 19		
Signature:		6/7/2019	

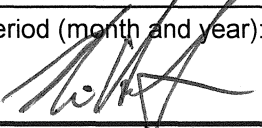
Date	Water production, pH and free chlorine residual						Chemical usage					
	Triangle Station			Riverside Station			Triangle Station			Riverside Station		
	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH	Average free chlorine residual	Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.01	7.67	1.28	0.58	7.67	0.87	2.1	12.7		1.3	5.5	
2	1.03	7.74	1.29	0.60	7.66	0.83	2.7	13.0		1.3	5.7	
3	1.02	7.54	1.28	0.58	7.66	0.81	2.2	12.6		1.4	5.6	
4	1.01	7.69	1.25	0.59	7.66	0.80	-0.8	12.6		1.3	5.4	
5	0.97	7.71	1.22	0.49	7.66	0.78	1.8	12.1		1.1	4.6	
6	1.10	7.69	1.13	0.61	7.65	0.78	4.9	14.3	100	1.4	5.9	50
7	0.97	7.46	1.14	0.66	7.65	0.84	2.4	11.4		1.5	6.1	
8	1.16	7.74	1.18	0.64	7.64	0.87	2.0	14.1		1.5	6.0	
9	1.10	7.48	1.25	0.61	7.64	0.86	3.0	13.1		1.4	5.7	
10	1.00	7.79	1.27	0.65	7.64	0.85	2.0	12.1		1.4	6.0	
11	0.97	7.79	1.29	0.56	7.63	0.84	2.0	11.1		1.3	5.2	
12	0.87	7.75	1.31	0.61	7.62	0.83	2.0	10.1		1.4	5.5	
13	1.11	7.75	1.28	0.61	7.62	0.83	3.0	13.1	100	1.4	5.7	
14	1.04	7.82	1.27	0.55	7.61	0.82	2.0	13.1		1.3	5.2	50
15	1.03	7.81	1.26	0.64	7.62	0.82	2.0	12.1		1.4	5.9	
16	1.13	7.81	1.27	0.59	7.62	0.80	3.0	13.1		1.4	5.5	
17	1.05	7.75	1.24	0.60	7.61	0.80	2.0	12.1		1.3	5.6	
18	1.00	7.80	1.27	0.58	7.61	0.79	3.0	12.1		1.4	5.4	
19	0.98	7.70	1.28	0.61	7.61	0.79	2.0	12.1		1.3	5.6	
20	1.09	7.70	1.27	0.57	7.61	0.78	2.0	13.1		1.4	5.4	50
21	1.17	7.73	1.27	0.64	7.60	0.78	3.0	14.1		1.4	6.0	
22	1.08	7.70	1.25	0.64	7.60	0.77	2.0	13.1		1.5	5.9	
23	1.19	7.79	1.25	0.64	7.60	0.77	3.0	14.1		1.4	5.8	
24	1.00	8.01	1.24	0.61	7.60	0.82	2.0	12.1		1.4	6.3	
25	1.01	7.81	1.25	0.58	7.60	0.86	2.0	12.1		1.4	6.1	
26	0.94	7.70	1.27	0.64	7.60	0.85	2.0	11.1		1.4	6.6	
27	1.07	7.67	1.23	0.57	7.59	0.84	2.0	13.1		1.3	5.9	
28	1.10	7.85	1.27	0.80	7.60	0.88	2.2	12.2		1.8	8.3	
29	1.00	7.97	1.28	0.46	7.60	0.91	3.0	12.1		1.0	5.0	
30	1.07	8.05	1.28	0.69	7.60	0.91	1.9	13.1		1.6	7.1	
31	1.18	7.81	1.31	0.84	7.60	0.99	3.0	14.1		1.8	8.6	
Summary	32.43	7.75	1.13	19.04	7.62	0.77	71	391	200	43	182	150
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used

	Chemical Name	Purpose	Chemical Strength	Total	Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	115	gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	573	gallons
NaF	Sodium fluoride	fluoridation		350	pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results

Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.81

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period (month and year): May, 2019			
Signature: 		June 7, 2019	

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.00	0.53	0.49	1.01	locked out of service for maintenance	0.59	0.59	1.61
2	0.00	0.64	0.39	1.03		0.62	0.62	1.65
3	0.00	0.64	0.38	1.02		0.60	0.60	1.62
4	0.00	0.61	0.40	1.01		0.61	0.61	1.62
5	0.00	0.60	0.38	0.97		0.50	0.50	1.48
6	0.31	0.07	0.72	1.10		0.63	0.63	1.73
7	0.00	0.28	0.69	0.97		0.68	0.68	1.65
8	0.34	0.02	0.80	1.16		0.66	0.66	1.83
9	0.33	0.00	0.77	1.10		0.63	0.63	1.73
10	0.30	0.00	0.70	1.00		0.67	0.67	1.66
11	0.29	0.00	0.68	0.97		0.58	0.58	1.55
12	0.00	0.00	0.87	0.87		0.62	0.62	1.50
13	0.56	0.35	0.20	1.11		0.63	0.63	1.74
14	0.67	0.37	0.00	1.04		0.56	0.56	1.60
15	0.65	0.38	0.00	1.03		0.66	0.66	1.68
16	0.70	0.43	0.00	1.13		0.61	0.61	1.74
17	0.67	0.38	0.00	1.05		0.62	0.62	1.67
18	0.66	0.34	0.00	1.00		0.59	0.59	1.59
19	0.77	0.20	0.00	0.98		0.62	0.62	1.60
20	0.43	0.39	0.28	1.09		0.59	0.59	1.68
21	0.00	0.60	0.57	1.17		0.66	0.66	1.83
22	0.00	0.60	0.48	1.08		0.66	0.66	1.74
23	0.00	0.66	0.52	1.19		0.66	0.66	1.84
24	0.00	0.55	0.45	1.00		0.63	0.63	1.63
25	0.00	0.60	0.40	1.01		0.60	0.60	1.60
26	0.00	0.66	0.29	0.94		0.66	0.66	1.60
27	0.00	0.62	0.46	1.07		0.59	0.59	1.66
28	0.00	0.64	0.45	1.10		0.83	0.83	1.92
29	0.00	0.56	0.44	1.00		0.48	0.48	1.48
30	0.00	0.64	0.43	1.07		0.71	0.71	1.78
31	0.00	0.70	0.48	1.18		0.86	0.86	2.04
Sum	6.67	13.05	12.71	32.43	0.00	19.63	19.63	52.06

62% Triangle

MGD

MGD

MGD

38% Riverside

1.05

0.63

1.68

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Triangle Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080			
Reporting period:	May, 2019	Notes: See notes below for specific operating conditions.	
Signature:	6/7/2019	Date	GAUD mg/L
		5/21/2019 11:15	0.67
		Location	HETL mg/L
		Triangle Station	0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	1.01	84	0.71	1.49
2	1.03	56	0.72	0.98
3	1.02	28	0.71	0.49
4	1.01	41	0.68	0.73
5	0.97	41	0.68	0.76
6	1.10	41	0.69	0.67
7	0.97	40	0.73	0.74
8	1.16	50	0.75	0.77
9	1.10	40	0.78	0.65
10	1.00	49	0.77	0.89
11	0.97	40	0.79	0.74
12	0.87	40	0.81	0.82
13	1.11	40	0.77	0.65
14	1.04	42	0.77	0.73
15	1.03	39	0.77	0.68
16	1.13	40	0.78	0.64
17	1.05	54	0.78	0.93
18	1.00	41	0.80	0.74
19	0.98	41	0.79	0.76
20	1.09	41	0.69	0.68
21	1.17	40	0.67	0.62
22	1.08	47	0.65	0.79
23	1.19	45	0.62	0.68
24	1.00	46	0.64	0.83
25	1.01	51	0.69	0.90
26	0.94	51	0.68	0.96
27	1.07	51	0.63	0.85
28	1.10	51	0.64	0.83
29	1.00	54	0.69	0.97
30	1.07	52	0.66	0.87
31	1.18	73	0.75	1.11
Avg	1.05	46.68	0.72	0.81
Min	0.87	28.00	0.62	0.49
Max	1.19	84.00	0.81	1.49
Total	32.43	1,447.00		

Operating comments

Flow accumulator still not reporting properly. Use Daily Residual for compliance determination.

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Riverside Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period: May, 2019			
Signature:	6/7/2019	Date	GAUD mg/L
		5/21/2019 8:05	0.74
		Location	HETL mg/L
		Riverside Station	0.7

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.58	19	0.75	0.59
2	0.60	21	0.75	0.63
3	0.58	20	0.75	0.62
4	0.59	20	0.75	0.61
5	0.49	16	0.74	0.59
6	0.61	19	0.74	0.56
7	0.66	22	0.68	0.60
8	0.64	22	0.66	0.62
9	0.61	21	0.66	0.62
10	0.65	22	0.66	0.61
11	0.56	19	0.66	0.61
12	0.61	20	0.65	0.59
13	0.61	21	0.65	0.62
14	0.55	17	0.66	0.56
15	0.64	22	0.68	0.62
16	0.59	21	0.76	0.64
17	0.60	21	0.80	0.63
18	0.58	20	0.80	0.62
19	0.61	21	0.79	0.62
20	0.57	18	0.71	0.57
21	0.64	23	0.64	0.64
22	0.64	23	0.65	0.64
23	0.64	20	0.72	0.56
24	0.61	23	0.73	0.67
25	0.58	20	0.66	0.62
26	0.64	23	0.65	0.65
27	0.57	20	0.64	0.63
28	0.80	29	0.70	0.65
29	0.46	17	0.75	0.66
30	0.69	24	0.74	0.63
31	0.84	30	0.72	0.64
Avg	0.61	21.10	0.71	0.62
Min	0.46	16.00	0.64	0.56
Max	0.84	30.00	0.80	0.67
Total	19.04	654.00		

Operating comments

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: May, 2019

Reporting date: 6/7/2019



Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
5/1/2019	85,164	1.25	0.7	
5/2/2019	83,953	1.21	0.7	
5/3/2019	82,086	1.33	0.7	
5/4/2019	74,336	1.39	0.7	
5/5/2019	69,914	1.40	0.6	
5/6/2019	86,500	1.31	0.8	
5/7/2019	84,094	1.20	0.7	
5/8/2019	80,078	1.19	0.7	
5/9/2019	81,820	0.97	0.6	
5/10/2019	81,414	1.03	0.7	
5/11/2019	52,672	1.33	0.5	
5/12/2019	0	1.42	-	no consumption
5/13/2019	136,633	1.29	1.2	
5/14/2019	75,938	1.42	0.6	
5/15/2019	76,070	1.46	0.6	
5/16/2019	85,289	1.12	0.6	
5/17/2019	98,664	1.17	0.5	
5/18/2019	7,219	1.14	0.1	
5/19/2019	73,398	1.14	0.5	
5/20/2019	81,016	1.24	0.6	
5/21/2019	85,023	1.32	0.6	
5/22/2019	84,227	1.34	0.7	
5/23/2019	85,031	1.36	0.6	
5/24/2019	82,219	1.42	0.6	
5/25/2019	74,461	1.39	0.6	
5/26/2019	76,609	1.40	0.5	
5/27/2019	66,438	1.43	0.5	
5/28/2019	84,625	1.42	0.6	
5/29/2019	84,359	1.58	0.7	
5/30/2019	87,836	1.63	0.7	
5/31/2019	179,680	1.55	1.3	
Sum	2,486,766		19.5	
Average	80,218	1.3	0.6	
Max		1.6		

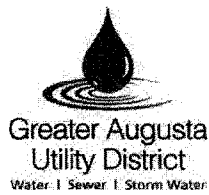
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ccolwell@greateraugustautilitydistrict.org

July 8, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of June, 2019.

Note that the so-called MainEx well (southerly well at Riverside Drive) is still locked and tagged out of service. We have ordered a sampling station to install on the well and will keep the DWP notified as we move forward with our plans to return the well to service. For now, it remains out of service.

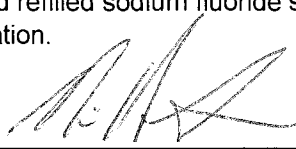
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026	Cleaned and refilled sodium fluoride system on June 13 at Triangle Station.	
Reporting period (month and year): June - 18			
Date: July 10, 2018			
Signature:			

Water production, pH and free chlorine residual							Chemical usage					
Triangle Station			Riverside Station				Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH		Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.03	8.03	1.31	0.51	7.60	1.06	2	13		1.2	5	
2	0.97	7.94	1.34	0.61	7.60	1.07	2	11		1.4	6	
3	0.98	7.93	1.22	0.63	7.60	1.06	2	12		1.4	7	
4	1.34	7.80	1.38	0.68	7.59	1.05	3	16		1.5	7	
5	1.07	7.72	1.29	0.64	7.59	1.05	2	11		1.4	7	50
6	1.08	7.76	1.27	0.63	7.59	1.05	3	13		1.5	6	
7	1.21	7.71	1.26	0.68	7.58	1.04	3	14		1.5	7	
8	1.08	7.49	1.22	0.68	7.58	1.04	2	12		1.5	7	
9	1.06	7.52	1.21	0.67	7.57	1.04	3	12		1.5	7	
10	1.15	7.56	1.19	0.70	7.57	1.03	3	14		1.6	7	
11	1.14	7.58	1.18	0.67	7.57	1.02	2	13		1.6	7	
12	1.13	7.56	1.18	0.68	7.57	1.02	3	13		1.5	7	
13	1.10	7.55	1.18	0.65	7.56	1.02	2	12	550	1.4	7	50
14	1.07	7.56	1.18	0.64	7.57	1.02	3	13		1.5	7	
15	0.98	7.57	1.16	0.65	7.56	1.01	2	11		1.5	7	
16	1.00	7.58	1.15	0.64	7.56	1.00	2	12		1.4	7	
17	1.15	7.57	1.21	0.71	7.56	0.99	3	13		1.6	7	
18	1.30	7.57	1.24	0.68	7.56	0.99	2	14		1.6	7	
19	1.18	7.60	1.34	0.71	7.56	0.98	3	14		1.5	7	
20	1.17	7.60	1.35	0.66	7.56	0.97	2	13		1.5	7	50
21	1.08	7.59	1.33	0.63	7.56	0.97	3	12		1.4	7	
22	1.06	7.57	1.33	0.65	7.56	0.97	2	12		1.5	7	
23	1.03	7.55	1.37	0.65	7.56	0.96	2	12		1.4	7	
24	1.23	7.56	1.35	0.67	7.56	0.94	3	15		1.5	7	
25	1.32	7.55	1.37	0.69	7.56	0.88	3	16		1.6	7	
26	1.10	7.55	1.36	0.88	7.57	0.86	2	13		2.0	9	
27	1.20	7.55	1.31	0.50	7.57	0.84	3	14		1.2	5	50
28	1.16	7.57	1.25	0.69	7.58	0.85	2	14		1.5	7	
29	1.13	7.58	1.25	0.61	7.58	0.85	3	14		1.4	6	
30	1.03	7.59	1.25	0.70	7.58	0.85	2	12		1.6	7	
Summary	33.57	7.63	1.15	19.78	7.57	0.84	73	392	550	45	204	200
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	118 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	597 gallons
NaF	Sodium fluoride	fluoridation		750 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
# of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.77

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name: Greater Augusta Utility District		Community System	
PWSID#: 90080		List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME License #:	Brian Tarbuck 2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period (month and year): June, 2018			
Date: July 10, 2018			
Signature:			

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.00	0.63	0.39	1.03	Well offline	0.51	0.51	1.54
2	0.00	0.71	0.26	0.97		0.61	0.61	1.58
3	0.00	0.55	0.43	0.98		0.63	0.63	1.62
4	0.00	0.76	0.59	1.34		0.68	0.68	2.02
5	0.00	0.60	0.47	1.07		0.64	0.64	1.71
6	0.00	0.59	0.49	1.08		0.63	0.63	1.71
7	0.38	0.18	0.66	1.21		0.68	0.68	1.90
8	0.31	0.00	0.77	1.08		0.68	0.68	1.76
9	0.19	0.00	0.87	1.06		0.67	0.67	1.73
10	0.39	0.00	0.76	1.15		0.70	0.70	1.85
11	0.33	0.00	0.81	1.14		0.67	0.67	1.82
12	0.40	0.00	0.73	1.13		0.68	0.68	1.81
13	0.29	0.02	0.79	1.10		0.65	0.65	1.76
14	0.37	0.00	0.70	1.07		0.64	0.64	1.71
15	0.29	0.00	0.69	0.98		0.65	0.65	1.64
16	0.30	0.00	0.70	1.00		0.64	0.64	1.64
17	0.45	0.00	0.70	1.15		0.71	0.71	1.86
18	0.52	0.34	0.44	1.30		0.68	0.68	1.99
19	0.68	0.50	0.00	1.18		0.71	0.71	1.89
20	0.72	0.44	0.02	1.17		0.66	0.66	1.83
21	0.72	0.36	0.01	1.08		0.63	0.63	1.71
22	0.69	0.37	0.01	1.06		0.65	0.65	1.70
23	0.74	0.28	0.01	1.03		0.65	0.65	1.68
24	0.16	0.54	0.54	1.23		0.67	0.67	1.90
25	0.00	0.71	0.61	1.32		0.69	0.69	2.02
26	0.00	0.62	0.48	1.10		0.88	0.88	1.98
27	0.00	0.63	0.57	1.20		0.50	0.50	1.70
28	0.00	0.60	0.57	1.16		0.69	0.69	1.85
29	0.00	0.58	0.56	1.13		0.61	0.61	1.75
30	0.00	0.59	0.44	1.03		0.70	0.70	1.73
Sum	7.93	10.58	15.06	33.57	0.00	19.78	19.78	53.35

63% Triangle
37% Riverside

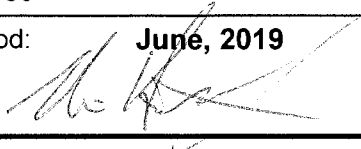
MGD
1.12

MGD
0.66

MGD
1.78

Monthly Fluoride Report System Type - Fluoride Systems		System Information			
System Name:	Greater Augusta Utility District	Treatment plant:	Triangle Station		
		Chemical Used:	Sodium Fluoride		
PWSID#: 90080					
Reporting period:	June, 2019	Notes: See notes below for specific operating conditions.			
Signature:	7/10/2019	Date	GAUD mg/L	Location	HETL mg/L
		6/19/2019 10:30	0.81	Triangle Station	0.80

Fluoride					Operating comments
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation	
units:	Mgals	gallons	mg/L	mg/L	
1	1.03		1.13	0.00	Makeup water meter not reporting to Excel reporter
2	0.97		1.05	0.00	
3	0.98		0.82	0.00	
4	1.34		0.29	0.00	Fluoride system offline for maintenance. Water softener not working per design; required new controller.
5	1.07		0.07	0.00	
6	1.08		0.07	0.00	
7	1.21		0.07	0.00	
8	1.08		0.07	0.00	
9	1.06		0.07	0.00	
10	1.15		0.07	0.00	
11	1.14		0.07	0.00	
12	1.13		0.07	0.00	
13	1.10		0.41	0.00	
14	1.07		0.79	0.00	Fluoride system offline; only operating when multiple wells online; pump motor failed; new motor ordered
15	0.98		0.84	0.00	
16	1.00		0.82	0.00	
17	1.15		0.77	0.00	
18	1.30		0.77	0.00	
19	1.18		0.74	0.00	
20	1.17		0.73	0.00	
21	1.08		0.71	0.00	
22	1.06		0.11	0.00	
23	1.03		0.08	0.00	
24	1.23		0.07	0.00	
25	1.32		0.07	0.00	
26	1.10		0.07	0.00	
27	1.20		0.40	0.00	
28	1.16		0.10	0.00	
29	1.13		0.07	0.00	
30	1.03		0.07	0.00	
Avg	1.12	#DIV/0!	0.38	0.00	
Min	0.97	0.00	0.07	0.00	
Max	1.34	0.00	1.13	0.00	
Total	33.57	0.00			

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Riverside Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period: June, 2019		Date	GAUD mg/L
Signature:  7/10/2019		6/11/2019 8:45	0.71
		Location	HETL mg/L
		Riverside Station	0.70

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.51	18	0.71	0.63
2	0.61	22	0.72	0.65
3	0.63	22	0.72	0.63
4	0.68	24	0.69	0.64
5	0.64	21	0.70	0.59
6	0.63	22	0.71	0.63
7	0.68	25	0.72	0.66
8	0.68	24	0.72	0.63
9	0.67	24	0.72	0.65
10	0.70	25	0.71	0.64
11	0.67	24	0.71	0.64
12	0.68	24	0.72	0.64
13	0.65	21	0.73	0.58
14	0.64	23	0.73	0.65
15	0.65	23	0.71	0.64
16	0.64	23	0.69	0.65
17	0.71	25	0.70	0.64
18	0.68	25	0.70	0.66
19	0.71	25	0.68	0.64
20	0.66	22	0.68	0.60
21	0.63	22	0.68	0.63
22	0.65	23	0.70	0.64
23	0.65	23	0.70	0.64
24	0.67	23	0.69	0.62
25	0.69	25	0.70	0.65
26	0.88	32	0.68	0.65
27	0.50	15	0.68	0.54
28	0.69	24	0.68	0.63
29	0.61	22	0.68	0.65
30	0.70	25	0.69	0.64
Avg	0.66	23.20	0.70	0.63
Min	0.50	15.00	0.68	0.54
Max	0.88	32.00	0.73	0.66
Total	19.78	696.00		

Operating comments

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine



Reporting month: June, 2019

Reporting date: 7/8/2019

Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
6/1/2019	75,531	1.48	0.6	
6/2/2019	69,656	1.44	0.5	
6/3/2019	83,688	1.48	0.6	
6/4/2019	83,695	1.51	0.7	
6/5/2019	85,555	1.46	0.6	
6/6/2019	82,086	1.39	0.6	
6/7/2019	164,711	1.36	1.4	
6/8/2019	87,430	1.49	0.7	
6/9/2019	81,555	1.49	0.6	
6/10/2019	158,820	1.49	1.3	
6/11/2019	89,438	1.39	0.7	
6/12/2019	158,422	1.31	1.1	
6/13/2019	123,133	1.39	1.0	
6/14/2019	174,328	1.35	1.2	
6/15/2019	80,352	1.40	0.6	
6/16/2019	80,883	1.35	0.6	
6/17/2019	168,578	1.29	1.2	
6/18/2019	97,195	1.25	0.5	
6/19/2019	165,773	1.38	1.2	
6/20/2019	111,766	1.57	0.8	
6/21/2019	139,438	1.43	1.1	
6/22/2019	83,156	1.54	0.6	
6/23/2019	154,281	1.51	1.1	
6/24/2019	89,305	1.48	0.7	
6/25/2019	174,328	1.49	1.3	
6/26/2019	190,773	1.56	1.4	
6/27/2019	72,461	1.65	0.6	
6/28/2019	89,703	1.42	0.6	
6/29/2019	158,023	1.42	1.2	
6/30/2019	85,164	1.45	0.6	
Sum	3,459,227		25.7	
Average	115,308	1.4	0.9	
Max		1.7		

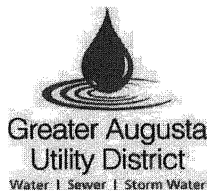
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kknight@greateraugustautilitydistrict.org

Charlotte Warren, Hallowell voting member
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ccolwell@greateraugustautilitydistrict.org

August 2, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of July, 2019.

Note that the so-called MainEx well (southerly well at Riverside Drive) is still locked and tagged out of service. We have ordered a sampling station to install on the well and will keep the DWP notified as we move forward with our plans to return the well to service. For now, it remains out of service.

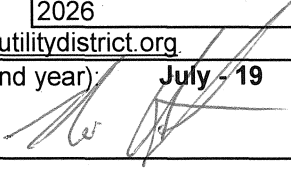
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period (month and year):	July - 19		
Date:	August 2, 2019		
Signature:			

Water production, pH and free chlorine residual							Chemical usage					
Triangle Station			Riverside Station				Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH		Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.11	7.60	1.23	0.69	7.58	0.88	14	3		1.6	7	
2	1.30	7.63	1.33	0.88	7.56	0.90	16	2		2.0	9	
3	1.10	7.62	1.33	0.58	7.56	0.89	13	3		1.3	6	
4	1.05	7.61	1.29	0.61	7.56	0.78	13	2		1.4	6	
5	1.13	7.62	1.29	0.88	7.56	0.88	13	3		2.0	9	
6	1.00	7.63	1.18	0.49	7.55	0.87	13	2		1.2	5	
7	1.06	7.60	1.31	0.60	7.56	0.86	13	3		1.3	6	
8	1.23	7.61	1.31	0.68	7.56	0.86	15	2	100	1.6	7	
9	1.20	7.60	1.29	0.68	7.56	0.85	15	3		1.5	7	
10	1.24	7.58	1.28	0.88	7.56	0.85	16	2		2.0	9	50
11	1.25	7.59	1.29	0.54	7.55	0.85	15	3		1.3	6	
12	1.04	7.60	1.29	0.67	7.55	0.91	13	2	50	1.5	7	
13	1.04	7.60	1.29	0.62	7.55	0.94	13	3		1.4	7	
14	1.04	7.62	1.29	0.62	7.54	0.93	13	2		1.5	7	
15	1.20	7.59	1.28	0.69	7.55	0.92	16	3		1.5	8	50
16	1.24	7.58	1.27	0.72	7.55	0.97	15	2		1.7	8	
17	1.26	7.61	1.27	0.88	7.55	1.07	16	3		2.0	9	
18	1.08	7.61	1.25	0.57	7.55	1.09	14	2		1.5	6	
19	1.58	7.60	1.25	0.79	7.54	0.94	19	4		2.1	8	
20	0.89	7.61	1.17	0.71	7.54	1.06	11	2		1.9	7	
21	1.36	7.60	1.16	0.71	7.54	1.06	17	2		1.9	7	
22	1.05	7.60	0.90	0.72	7.54	1.05	12	3	50	2.0	7	
23	1.16	7.61	1.29	0.63	7.55	1.04	15	2		1.7	6	50
24	1.27	7.60	1.28	0.72	7.55	1.03	16	3		2.0	7	
25	1.23	7.59	1.29	0.70	7.55	1.02	15	2		2.0	7	
26	1.32	7.59	1.28	0.88	7.55	1.02	17	3		2.4	9	
27	1.21	7.61	1.31	0.62	7.54	1.01	16	3		1.7	7	
28	1.16	7.61	1.26	0.68	7.54	1.00	15	2		1.9	7	
29	1.17	7.63	1.21	0.68	7.54	1.00	14	3		1.9	7	
30	1.16	7.62	1.20	0.88	7.54	0.99	15	2		2.4	9	
31	1.65	7.62	1.23	0.66	7.54	0.98	21	4	100	1.8	7	
Summary	36.74	7.61	0.90	21.67	7.55	0.78	463	80	300	54	225	150
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	517 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	305 gallons
NaF	Sodium fluoride	fluoridation		450 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.83

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period:	July, 2019		
Date:	August 2, 2019		
Signature:			

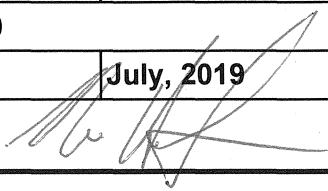
Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.42	0.56	0.13	1.11	0.00	0.69	0.69	1.80
2	0.69	0.61	0.00	1.30	0.00	0.88	0.88	2.18
3	0.59	0.51	0.00	1.10	0.00	0.58	0.58	1.68
4	0.62	0.42	0.00	1.05	0.00	0.61	0.61	1.65
5	0.63	0.50	0.00	1.13	0.00	0.88	0.88	2.02
6	0.60	0.40	0.00	1.00	0.00	0.49	0.49	1.49
7	0.70	0.37	0.00	1.06	0.00	0.60	0.60	1.66
8	0.72	0.51	0.00	1.23	0.00	0.68	0.68	1.91
9	0.69	0.51	0.00	1.20	0.00	0.68	0.68	1.88
10	0.74	0.50	0.00	1.24	0.00	0.88	0.88	2.12
11	0.65	0.42	0.18	1.25	0.00	0.54	0.54	1.78
12	0.59	0.45	0.00	1.04	0.00	0.67	0.67	1.71
13	0.67	0.36	0.00	1.04	0.00	0.62	0.62	1.66
14	0.64	0.40	0.00	1.04	0.00	0.62	0.62	1.66
15	0.74	0.46	0.00	1.20	0.00	0.69	0.69	1.89
16	0.70	0.55	0.00	1.24	0.00	0.72	0.72	1.97
17	0.72	0.32	0.22	1.26	0.00	0.88	0.88	2.15
18	0.58	0.50	0.00	1.08	0.00	0.57	0.57	1.65
19	0.73	0.50	0.35	1.58	0.00	0.79	0.79	2.36
20	0.13	0.57	0.19	0.89	0.00	0.71	0.71	1.59
21	0.28	0.80	0.27	1.36	0.00	0.71	0.71	2.07
22	0.01	0.52	0.52	1.05	0.00	0.72	0.72	1.77
23	0.00	0.49	0.67	1.16	0.00	0.63	0.63	1.80
24	0.00	0.58	0.69	1.27	0.00	0.72	0.72	1.99
25	0.00	0.55	0.67	1.23	0.00	0.70	0.70	1.92
26	0.00	0.60	0.72	1.32	0.00	0.88	0.88	2.20
27	0.00	0.30	0.90	1.21	0.00	0.62	0.62	1.83
28	0.00	0.50	0.65	1.16	0.00	0.68	0.68	1.84
29	0.19	0.46	0.52	1.17	0.00	0.68	0.68	1.84
30	0.26	0.38	0.52	1.16	0.00	0.88	0.88	2.04
31	0.17	0.64	0.84	1.65	0.00	0.66	0.66	2.31
Sum	13.45	15.24	8.05	36.74	0.00	21.67	21.67	58.41

63% Triangle
37% Riverside

MGD
1.19

MGD
0.70

MGD
1.88

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: Triangle Station			
System Name: Greater Augusta Utility District		Chemical Used: Sodium Fluoride			
PWSID#: 90080					
Reporting period: July, 2019		Notes: See notes below for specific operating conditions.			
Signature: 		Date	GAUD mg/L	Location	HETL mg/L
8/2/2019		7/17/2019 11:10	0.80	Triangle Station	0.8

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	1.11		0.07	0.00
2	1.30		0.43	0.00
3	1.10		0.67	0.00
4	1.05		0.66	0.00
5	1.13		0.64	0.00
6	1.00		0.64	0.00
7	1.06		0.68	0.00
8	1.23		0.70	0.00
9	1.20		0.69	0.00
10	1.24		0.75	0.00
11	1.25		0.79	0.00
12	1.04		0.77	0.00
13	1.04		0.76	0.00
14	1.04		0.77	0.00
15	1.20		0.81	0.00
16	1.24	3	0.81	0.04
17	1.26	3	0.79	0.04
18	1.08	2	0.78	0.03
19	1.58	3	0.78	0.03
20	0.89	2	0.72	0.04
21	1.36	2	0.70	0.03
22	1.05	2	0.73	0.03
23	1.16	3	0.78	0.05
24	1.27	2	0.77	0.03
25	1.23	3	0.75	0.04
26	1.32	2	0.72	0.03
27	1.21	3	0.74	0.04
28	1.16	2	0.73	0.03
29	1.17	2	0.70	0.03
30	1.16	2	0.70	0.03
31	1.65	3	0.71	0.03
Avg	1.19	2.44	0.70	0.02
Min	0.89	2.01	0.07	0.00
Max	1.65	3.04	0.81	0.05
Total	36.74	38.98		

Operating comments

Gallons of makeup water stil not reporting accurately.

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: Riverside Station			
System Name: Greater Augusta Utility District		Chemical Used: Sodium Fluoride			
PWSID#: 90080		Notes: See notes below for specific operating conditions.			
Reporting period: June, 2019					
Signature:		7/10/2019	6/11/2019 8:45	0.71	Riverside Station
Fluoride					
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation	Operating comments
units:	Mgals	gallons	mg/L	mg/L	
1	0.51	18	0.71	0.63	
2	0.61	22	0.72	0.65	
3	0.63	22	0.72	0.63	
4	0.68	24	0.69	0.64	
5	0.64	21	0.70	0.59	
6	0.63	22	0.71	0.63	
7	0.68	25	0.72	0.66	
8	0.68	24	0.72	0.63	
9	0.67	24	0.72	0.65	
10	0.70	25	0.71	0.64	
11	0.67	24	0.71	0.64	
12	0.68	24	0.72	0.64	
13	0.65	21	0.73	0.58	
14	0.64	23	0.73	0.65	
15	0.65	23	0.71	0.64	
16	0.64	23	0.69	0.65	
17	0.71	25	0.70	0.64	
18	0.68	25	0.70	0.66	
19	0.71	25	0.68	0.64	
20	0.66	22	0.68	0.60	
21	0.63	22	0.68	0.63	
22	0.65	23	0.70	0.64	
23	0.65	23	0.70	0.64	
24	0.67	23	0.69	0.62	
25	0.69	25	0.70	0.65	
26	0.88	32	0.68	0.65	
27	0.50	15	0.68	0.54	
28	0.69	24	0.68	0.63	
29	0.61	22	0.68	0.65	
30	0.70	25	0.69	0.64	
Avg	0.66	23.20	0.70	0.63	
Min	0.50	15.00	0.68	0.54	
Max	0.88	32.00	0.73	0.66	
Total	19.78	696.00			

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: July, 2019

Reporting date: 8/2/2019

Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
7/1/2019	173,531	1.36	0.6	
7/2/2019	86,094	1.41	1.3	
7/3/2019	82,484	1.39	0.6	
7/4/2019	131,820	1.29	0.6	
7/5/2019	84,227	1.28	1.0	
7/6/2019	75,930	1.15	0.6	
7/7/2019	70,320	1.06	0.6	
7/8/2019	77,406	1.03	0.5	
7/9/2019	85,700	1.04	0.5	
7/10/2019	87,434	1.04	-	usage reading failed this day...
7/11/2019	86,094	0.99	0.5	
7/12/2019	84,094	1.00	0.5	
7/13/2019	77,406	0.97	0.6	
7/14/2019	73,395	0.96	0.5	
7/15/2019	65,641	0.95	0.4	
7/16/2019	0	0.91	-	no consumption
7/17/2019	242,113	0.94	0.6	
7/18/2019	89,840	1.07	0.6	
7/19/2019	165,105	0.83	0.7	
7/20/2019	80,082	1.11	0.3	
7/21/2019	83,688	0.95	0.5	
7/22/2019	162,836	0.85	0.7	
7/23/2019	85,695	0.96	0.1	
7/24/2019	157,352	1.00	1.0	
7/25/2019	86,363	1.02	0.5	
7/26/2019	159,492	1.05	1.3	
7/27/2019	82,086	1.08	0.7	
7/28/2019	78,074	1.08	0.6	
7/29/2019	166,578	1.02	1.2	
7/30/2019	90,777	1.03	0.7	
7/31/2019	162,297	1.06	1.3	
Sum	3,071,657		18.1	
Average	102,389	1.1	0.6	
Max		1.4		

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September 9, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of August, 2019.

Note that the so-called MainEx well (the southerly well at Riverside Drive) remains out of service. A recent bacteria sample was negative for both *e. coli* and total coliforms. We are planning to pump the well to 'waste' for several weeks to see if that reduces the hardness observed in the well. A test from late August showed that the hardness after pumping the well to waste for about an hour was 240 mg/L. The hardness of the northerly well at Riverside was 130 mg/L. Ideally both wells would operate below 140 mg/L hardness.

We lost communications with Triangle station from August 21 to August 26. The firewall at Triangle station was compromised and took days of troubleshooting to repair it. While the station can operate independently of outside communications it impaired our ability to "see" the operation and document station performance. Our operators went to the station at 4 hour intervals to record data and physically observe station performance. We have ordered new firewalls and are reviewing our configuration files and how those files are archived. We're also going to install systems at both Triangle and Riverside that will 'harvest' data from the programmable logic controllers. This will ensure that we'll have operational data recorded at a high frequency for analysis and reporting if we lose communications in the future.

Finally, we need to reactivate our so-called "river line". It's a 16" cast iron pipe installed beneath the Kennebec River in 1936 that conveys water from the east side of the distribution to the west side of the system and vice versa. After we installed the Riverside wells, we isolated the east and west distribution systems to evaluate performance and lead and copper results. Our lead and copper data showed we were well below the action levels required. Our water quality on both sides of the river is very similar from a pH, alkalinity and hardness perspective. Since we are seeing low levels of water in our Riverside well system we are anxious to reactivate the river line and balance flows between our east and west distribution systems. We are looking forward to meeting with the DWP to review our water quality data and develop a reactivation plan for the river line. I've included an excerpt from the 1936 annual report that explains the river line construction in detail.

You should find the following documents:

1. Operating report;
2. Water production report;

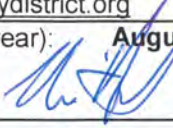
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

A handwritten signature in blue ink, appearing to read 'BT', with a large, stylized flourish extending from the end.

Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026 btarbuck@greteraugustautilitydistrict.org	We lost comms with Triangle station between 8/21 and 8/26 so we visited the station at 4 hour intervals to document operations.	
Reporting period (month and year):	August, 2019		
Date:	September 9, 2019		
Signature:			

Water production, pH and free chlorine residual							Chemical usage					
Triangle Station			Riverside Station				Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH		Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.39	7.61	1.23	0.75	7.54	0.97	3	17		2.0	8	50
2	1.32	7.60	1.24	0.75	7.54	0.95	2	17		2.1	8	
3	1.24	7.60	1.23	0.65	7.54	0.93	3	16		1.8	7	
4	1.26	7.61	1.23	0.73	7.54	0.92	3	16		2.0	7	
5	1.30	7.60	1.20	0.71	7.54	0.90	3	17	50	2.0	7	
6	1.49	7.58	1.15	0.77	7.54	0.91	3	19		2.1	8	
7	1.26	7.59	1.12	0.76	7.54	0.91	3	16		2.1	8	
8	1.20	7.60	1.11	0.73	7.54	0.91	2	15		2.0	7	50
9	1.24	7.59	1.12	0.65	7.54	0.90	3	16		1.8	7	
10	1.07	7.57	1.12	0.51	7.55	0.88	2	14		1.4	5	
11	1.21	7.55	1.12	0.75	7.55	0.88	3	16		2.1	8	
12	1.24	7.57	1.11	0.70	7.55	0.87	3	15		2.0	7	
13	1.29	7.59	1.13	0.65	7.55	0.87	3	17	100	1.8	7	
14	1.34	7.57	1.17	0.72	7.55	0.86	2	18		2.0	7	
15	1.29	7.57	1.16	0.73	7.55	0.85	3	17		2.0	7	50
16	1.16	7.57	1.22	0.60	7.55	0.87	3	16		1.7	6	
17	1.06	7.57	1.26	0.55	7.55	0.89	2	14		1.5	6	
18	1.07	7.59	1.26	0.68	7.55	0.89	2	15		1.9	7	
19	1.40	7.61	1.27	0.55	7.55	0.86	3	18		1.6	6	
20	1.20	7.57	1.29	0.60	7.55	0.86	2	21		1.6	6	
21		7.55	1.34	0.69	7.55	0.87	1	14		2.0	7	
22		7.62	1.38	0.69	7.54	0.86	2	12		1.8	7	50
23		7.63	1.46	0.76	7.55	0.85	4	22	100	2.1	8	
24			1.43	0.68	7.32	0.81	2	15		1.9	7	
25			1.35	0.66	6.78	0.73	2	15		1.8	6	
26		7.56	1.30	0.60	7.57	0.87	2	15		1.6	6	
27	0.93	7.60	1.25	0.72	7.57	0.87	1	11		2.0	8	
28	1.23	7.61	1.25	0.62	7.57	0.93	3	15		1.7	7	
29	1.17	7.61	1.25	0.66	7.57	0.92	2	14		1.8	8	
30	1.23	7.61	1.27	0.76	7.57	1.08	2	15		2.0	9	
31	0.86	7.58	1.28	0.73	7.57	1.20	2	10		2.0	9	
Summary	30.44	7.59	1.11	21.12	7.52	0.73	78	490	250	58	222	200
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	136 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	712 gallons
NaF	Sodium fluoride	fluoridation		450 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.62

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME License #:	Brian Tarbuck 2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period:	August, 2019		
Date:	September 9, 2019		
Signature:			

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.00	0.63	0.75	1.39	offline; pending reactivation approval from DWP	0.75	0.75	2.14
2	0.00	0.55	0.77	1.32		0.75	0.75	2.07
3	0.00	0.58	0.66	1.24		0.65	0.65	1.89
4	0.00	0.54	0.72	1.26		0.73	0.73	1.99
5	0.47	0.63	0.20	1.30		0.71	0.71	2.02
6	0.54	0.94	0.00	1.49		0.77	0.77	2.26
7	0.48	0.77	0.00	1.26		0.76	0.76	2.02
8	0.39	0.82	0.00	1.20		0.73	0.73	1.93
9	0.32	0.92	0.00	1.24		0.65	0.65	1.89
10	0.21	0.86	0.00	1.07		0.51	0.51	1.59
11	0.41	0.79	0.00	1.21		0.75	0.75	1.96
12	0.36	0.88	0.00	1.24		0.70	0.70	1.94
13	0.44	0.84	0.00	1.29		0.65	0.65	1.94
14	0.41	0.93	0.00	1.34		0.72	0.72	2.05
15	0.38	0.91	0.00	1.29		0.73	0.73	2.02
16	0.24	0.91	0.00	1.16		0.60	0.60	1.76
17	0.12	0.81	0.13	1.06		0.55	0.55	1.61
18	0.00	0.90	0.17	1.07		0.68	0.68	1.75
19	0.00	0.91	0.49	1.40		0.55	0.55	1.96
20	0.00	1.12	0.08	1.20		0.60	0.60	1.80
21	No data acquired during this period due to communications failure.					0.69	0.69	0.69
22						0.69	0.69	0.69
23						0.76	0.76	0.76
24						0.68	0.68	0.68
25						0.66	0.66	0.66
26						0.60	0.60	0.60
27	0.47	0.46	0.00	0.93		0.72	0.72	1.65
28	0.97	0.26	0.00	1.23		0.62	0.62	1.85
29	0.69	0.48	0.00	1.17		0.66	0.66	1.83
30	0.85	0.38	0.00	1.23		0.76	0.76	1.99
31	0.78	0.08	0.00	0.86		0.73	0.73	1.59
Sum	8.53	17.92	3.99	30.44	0.00	21.12	21.12	51.56

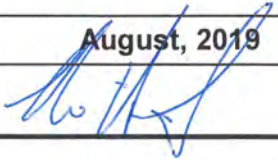
59% Triangle	MGD	MGD	MGD
41% Riverside	1.22	0.68	1.66

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Triangle Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080			
Reporting period:	August, 2019	Notes: See notes below for specific operating conditions.	
Signature:	9/9/2019	Date	GAUD mg/L
		8/20/19 2:05 PM	0.6
		Location	HETL mg/L
		Quality Inn & Suites	0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	1.39	45.0	0.71	0.58
2	1.32	45.0	0.70	0.61
3	1.24	42.7	0.69	0.62
4	1.26	42.7	0.69	0.61
5	1.30	42.7	0.70	0.59
6	1.49	43.0	0.71	0.52
7	1.26	48.0	0.69	0.69
8	1.20	47.0	0.63	0.70
9	1.24	43.0	0.70	0.63
10	1.07	43.7	0.75	0.73
11	1.21	43.7	0.75	0.65
12	1.24	43.7	0.72	0.63
13	1.29	43.0	0.72	0.60
14	1.34	45.0	0.77	0.61
15	1.29	41.0	0.75	0.57
16	1.16	40.0	0.75	0.62
17	1.06	42.3	0.72	0.72
18	1.07	42.3	0.73	0.71
19	1.40	42.3	0.73	0.54
20	1.20	53.0	0.73	0.79
21		33.0	0.77	
22		27.0	0.68	
23		57.0	0.67	
24		41.0	0.69	
25		41.0	0.70	
26		41.0	0.72	
27	0.93	38.0	0.70	0.73
28	1.23	44.1	0.72	0.65
29	1.17	43.0	0.69	0.66
30	1.23	43.5	0.69	0.64
31	0.86	32.6	0.73	0.68
Avg	1.22	42.59	0.71	0.64
Min	0.86	27.00	0.63	0.52
Max	1.49	57.00	0.77	0.79
Total	30.44	1,320.19		

Operating comments

No flow data recorded; chlorine residual and fluoride levels were recorded daily when operators visited the station to manually verify operation.

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: <u>Riverside Station</u>	
System Name:	Greater Augusta Utility District	Chemical Used: <u>Sodium Fluoride</u>	
PWSID#: 90080			
Reporting period: <u>August, 2019</u>		Notes: See notes below for specific operating conditions.	
Signature: 		Date	GAUD mg/L
9/9/2019		8/20/2019 11:40	0.6
		Location	HETL mg/L
		12 Williams Street	0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.75	23	0.62	0.55
2	0.75	24	0.65	0.58
3	0.65	21	0.67	0.58
4	0.73	23	0.67	0.57
5	0.71	24	0.74	0.61
6	0.77	23	0.74	0.53
7	0.76	23	0.72	0.54
8	0.73	20	0.73	0.50
9	0.65	20	0.76	0.56
10	0.51	16	0.77	0.56
11	0.75	22	0.77	0.53
12	0.70	20	0.75	0.52
13	0.65	19	0.70	0.52
14	0.72	20	0.68	0.50
15	0.73	19	0.67	0.47
16	0.60	16	0.68	0.48
17	0.55	16	0.70	0.53
18	0.68	20	0.71	0.53
19	0.55	15	0.71	0.49
20	0.60	17	0.71	0.51
21	0.69	20	0.77	0.52
22	0.69	17	0.76	0.45
23	0.76	22	0.69	0.52
24	0.68	19	0.70	0.50
25	0.66	19	0.67	0.52
26	0.60	17	0.69	0.51
27	0.72	21	0.74	0.53
28	0.62	17	0.72	0.49
29	0.66	19	0.71	0.52
30	0.76	22	0.69	0.52
31	0.73	21	0.71	0.52
Avg	0.68	19.84	0.71	0.52
Min	0.51	15.00	0.62	0.45
Max	0.77	24.00	0.77	0.61
Total	21.12	615.00		

Operating comments

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

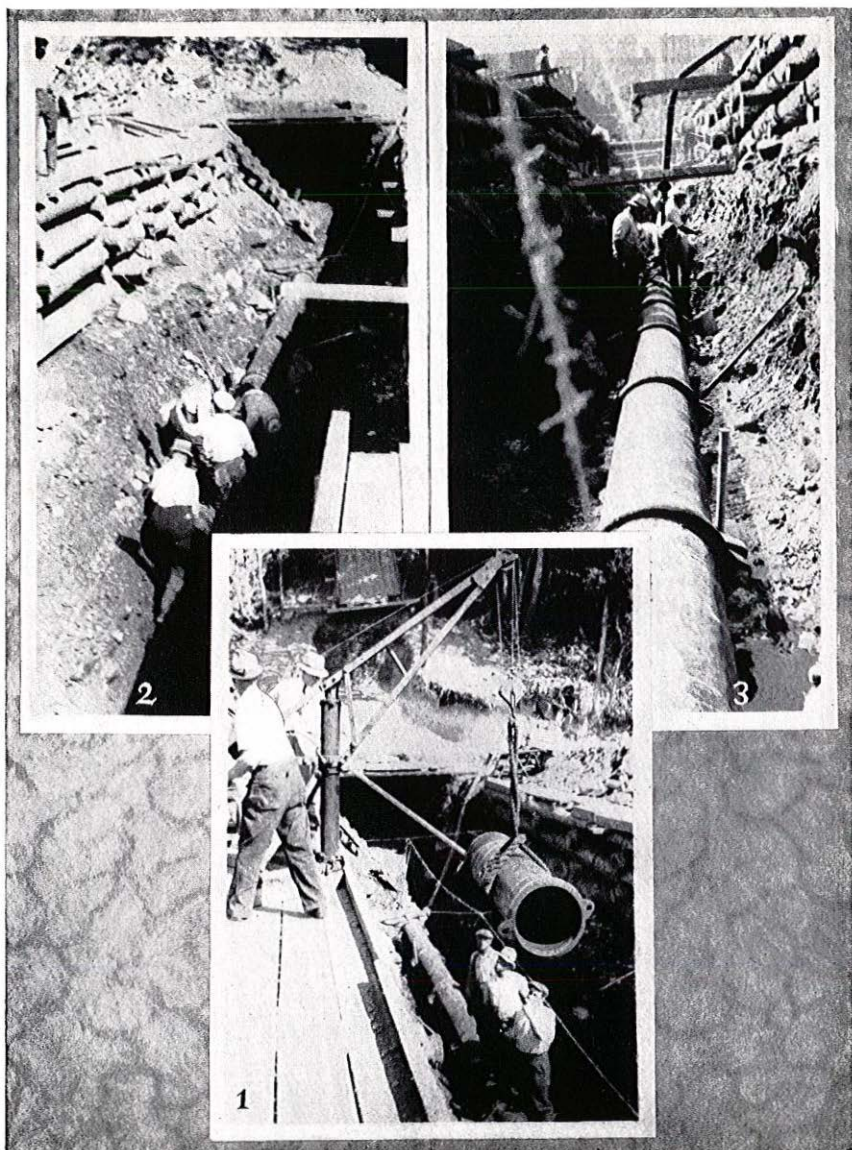
Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: August, 2019

Reporting date: 9/10/2019



Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
8/1/2019	88,504	1.13	0.7	
8/2/2019	155,215	1.20	1.2	
8/3/2019	74,730	1.18	0.6	
8/4/2019	83,426	1.05	0.5	
8/5/2019	85,426	0.97	0.7	
8/6/2019	84,895	1.01	0.8	
8/7/2019	160,160	1.10	1.3	
8/8/2019	83,688	1.12	0.7	
8/9/2019	84,094	1.10	-	temporarily lost comms this date
8/10/2019	72,191	1.06	0.6	
8/11/2019	71,391	1.04	0.6	
8/12/2019	152,539	1.10	1.4	
8/13/2019	85,695	1.05	0.7	
8/14/2019	160,027	1.05	1.3	
8/15/2019	84,090	1.09	0.8	
8/16/2019	81,684	0.98	0.7	
8/17/2019	78,613	0.93	0.7	
8/18/2019	78,609	0.88	0.7	
8/19/2019	121,254	0.85	1.0	
8/20/2019	121,793	0.80	1.0	
8/21/2019	83,555	0.79	0.7	
8/22/2019	85,430	0.78	0.8	
8/23/2019	149,867	0.77	1.5	
8/24/2019	72,461	0.87	0.7	
8/25/2019	27,406	0.73	0.3	
8/26/2019	124,328	0.75	1.1	
8/27/2019	105,617	0.61	0.8	
8/28/2019	84,359	1.11	1.1	
8/29/2019	83,016	1.11	1.2	
8/30/2019	161,102	1.08	2.6	
8/31/2019	129,945	1.14	2.1	
Sum	2,985,164		26.9	
Average	99,505	1.0	0.9	
Max		1.2		



CONSTRUCTION OF THE KENNEBEC RIVER PIPELINE
1. Lowering pipe into trench 2. Joining lengths of pipe together 3. Completed section of pipe

Report of Superintendent

To the Trustees of the Augusta Water District:

Gentlemen:

I submit herewith the thirty-second annual report of the Superintendent and Engineer of the District, covering activities for the year 1936.

The outstanding event of the year in this vicinity was the double flood of March 13th and 19th, 1936, when the Kennebec River reached the highest flow on record.

With a snowfall undiminished by thaws, on the 11th and 12th of the month a total rainfall of nearly seven inches fell, reducing the snow blanket to almost nothing, and swelling all streams to many times their normal flow.

The rising waters of the Kennebec started the ice from the whole length of the river moving; this ice jammed in the narrows below this city, causing the water to rise to unprecedented heights on the night of March 13th, so that the surface was within a very few feet of the corner of Bridge and Water Streets.

We of the operating department of the District felt that precautions should be taken to insure a water supply to the East side of the City, where are located the State, Federal and City hospitals, as well as a large proportion of the inhabitants. Since all water for these customers is carried on the bridges spanning the river, we saw that, in case of failure of one or more bridges, the East Side would suffer a shortage or be completely cut off from a supply of water.

Plans were accordingly made to provide at least a temporary service by means of cables stretched between high buildings on either side of the river, by means of which it was proposed to suspend as many lines of fire hose as possible to convey water across in quantities at least sufficient for domestic purposes.

Happily, these cables were not needed, as the three bridges

withstood a terrific battering and emerged practically unscathed from both floods.

This experience, however, emphasized the need of a pipe line across the river entirely independent of bridges, a need which was recognized as long ago as 1903, when the first surveys were made with such a crossing in view. Again in 1912, other routes were surveyed and abandoned due to what was then considered excessive costs the recently abandoned railroad bridge was purchased and a 16" pipe line laid upon it, connected on each side of the river to 16" lines in Water and Willow Streets.

In May, your Engineer was instructed to make surveys and tentative plans for a submerged pipe line connecting the water mains on either side of the river. These surveys were accordingly made and the location selected, from a point in Water Street near the railroad bridges, directly across the stream to a point in Willow Street near Myrtle.

This location was selected because it was very nearly the narrowest part of the river and pipes of the same size, namely 16", were already in place and available for connection.

Detailed plans of the proposed construction were made and submitted to Metcalf & Eddy, Consulting Engineers of Boston, for review and suggestion. The plans as drawn were approved by them and in June, by vote of the Board of Trustees, President Newbert and Superintendent Anthony were authorized to proceed with construction.

Plans and specifications were submitted to three concerns with extensive experience in submarine construction for estimates and bids.

Due to the uncertain character of the work to be done and the difficulty in making exact estimates of cost, the several concerns were invited to submit bids only upon the fee they would charge for supervising construction, with the District bearing the expenses of construction, whatever they might be.

These bids for supervision fee were as follows:

R. H. Houston, Inc., Portland, Maine	\$3,000
Sanders Engineering Co., Portland, Maine	3,500

Merritt, Chapman & Scott Corp.,
New London, Conn.

5,000

Estimates of costs were about \$38,000 in each case, exclusive of land purchases and pipe costs and labor of connecting the new pipe with existing pipes on either side.

It was then decided to engage the services of an experienced construction foreman and proceed with the installation without supervision of any outside organization.

Plans had been made to commence construction on the West side of the river and proceed with the pipe laying in an easterly direction. The advantages of this scheme were that the deepest part of the river channel would be passed through during the summer months when water levels could be expected to be at their lowest. It was also planned to commence not later than the first of July.

Due to difficulties in adjusting the price to be paid the Maine Central Railroad Company for land necessary on the West side, with consequent delay, it was decided to begin operations at once on the East side, trusting that an agreement might be reached before it was necessary to work on railroad property.

Accordingly, on July 22, materials for the cofferdam having arrived on the job, work was started and proceeded without serious delay until September 14 when the last length of pipe was laid in the easterly section of the cofferdam in the approximate center of the river, and a start made on dismantling the cofferdam, leaving a 60 foot island for a starting point to proceed with the next section of approximately 150 feet.

On October 2, the new section, previously constructed on the East side in shoal water, was set in position late in the afternoon and guyed to the Water District bridge. The current in the river was strong enough, however, to cause the guys to break, allowing the skeleton crib to float down river to a point behind the Colonial Theater, where remaining guys held it from further loss.

The next day, the crib was cut in half lengthwise and the

upstream half placed, loaded with rock ballast and guyed with stronger cables.

The downstream half was later placed in position and work started on the construction of the box coffer, to be filled with clay and gravel for water tightness.

On October 18, after several days of heavy rainfall, the river rose to near flood pitch and overturned the partially completed cofferdam, so that work was suspended until the river should return to more nearly normal flow.

Additional heavy equipment was secured, a large scow, derrick and hoisting engine, and work resumed clearing wreckage on October 31.

Early in November, it was decided to engage the services of Sanders Engineering Company to supervise the completion of the project, and on November 9, their superintendent, Mr. William McMillan, arrived and took charge.

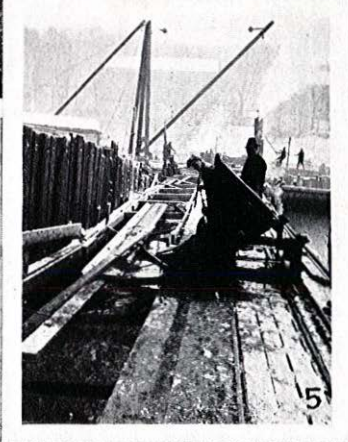
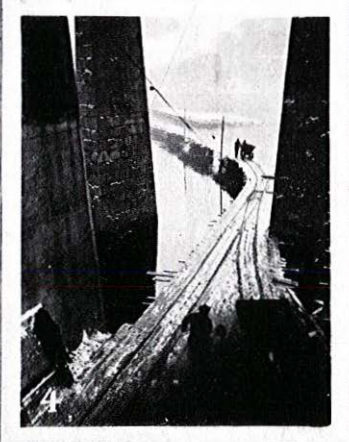
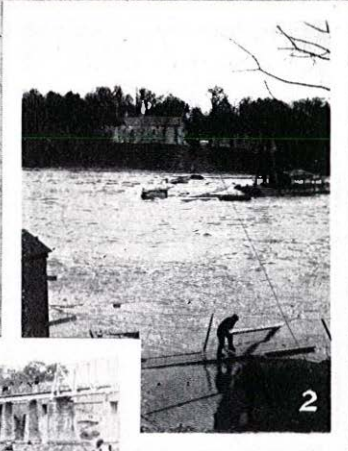
From that date on, work was carried on without cessation, day or night, with construction proceeding at a rapid pace, with the cofferdam successfully pumped out and drilling operations commenced on December 7.

On December 12, the river again rose sufficiently to flood the cofferdam and suspend operations until December 17 when the water was again pumped out and more pipe laid on the 19th and 20th.

On the 20th of December, predictions from river authorities stated that, due to heavy rains at the headwaters and the frozen condition of the ground, a water pitch equal to the normal spring runoff was to be expected by the following night.

These predictions proved correct and on the night of the 20th, work was suspended and the cofferdam allowed to fill, to reduce the strain of the rapidly rising water.

Late in the afternoon of the 21st, ice in the river began to move out, and as the water level was above the steel piling forming the cofferdam, the space inside was soon full of solid and slush ice. The river level remaining at a high point, it was impossible to start repairing damage until



CONSTRUCTION OF THE KENNEBEC RIVER PIPELINE

1. Cofferdam damaged by high water October 18th, 1936
2. Cofferdam submerged by high water December 20th, 1936
3. Section of pipe completed and being backfilled with gravel and concrete
4. Railroad track for handling materials on cofferdam
5. Dump car unloading gravel fill

December 26 and on January 1 drilling operations were resumed in a dry cofferdam.

Up to date, the cost of the project has been approximately \$50,000, with some 300 feet of pipe still to be laid and back-filled.

While approximately half of the pipe has been laid, it is not anticipated that the cost of the second half will nearly approach the cost of the first half, as most materials for the whole job have been purchased and the most difficult portion of the river channel completed.

A brief description of the way in which the pipe is constructed is desirable, at this point.

The pipe used is 16" Universal Type T for 250 pounds working pressure, and coated inside with a $\frac{1}{4}$ " cement lining. This lining in turn is coated with a double dipping of asphalt compound, as is the exterior of the pipe. After laying, the whole line to that point is placed under hydrostatic pressure of 150 pounds per square inch for a time and then tested for leakage for a period of 12 hours at 140 pounds per square inch. Leakage at this pressure is measured by means of a 1" domestic water meter, with allowable leakage rate at 1 gallon per 24 hours per linear foot of joint. Actual leakage to date has never exceeded 10% of the allowable and in a short time even this amount has ceased.

The pipe is laid in a trench excavated in the bottom of the river. Where ledge rock is encountered the minimum cover is four feet and where no ledge rock appears within the trench, the minimum cover is six feet.

After laying the pipe in a bed of fine gravel, the trench is backfilled with gravel from which all stones larger than a grapefruit have been removed, up to a point about one foot above the pipe, in gravel trench and one foot below the surface of the ledge trench. A layer of 10 to 12 inches of rich concrete is then laid over the gravel backfill and the remainder of the trench to the level of the river bottom is filled with large stones and gravel, well bedded together, in order to make the bed of the river as nearly uniform as possible.

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October 4, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of September, 2019.

You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

Brian Tarbuck, PE, System Class IV 2026

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

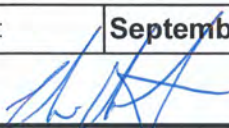
Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: September, 2019

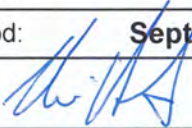
Reporting date: 10/4/2019



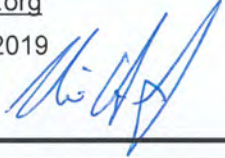
Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
9/1/2019	76,867	1.27	1.2	
9/2/2019	75,540	1.20	1.2	
9/3/2019	84,760	1.30	1.3	
9/4/2019	95,720	1.32	1.4	
9/5/2019	143,320	1.51	1.8	
9/6/2019	73,530	1.51	0.8	
9/7/2019	69,910	1.35	0.8	
9/8/2019	71,390	1.28	0.8	
9/9/2019	85,030	1.21	1.0	
9/10/2019	85,030	1.39	1.0	
9/11/2019	81,550	1.34	0.9	
9/12/2019	120,990	1.18	1.4	
9/13/2019	122,460	1.14	1.3	
9/14/2019	74,600	1.19	0.9	
9/15/2019	15,370	1.24	0.2	
9/16/2019	136,900	1.01	1.6	
9/17/2019	81,950	1.08	1.0	
9/18/2019	76,210	1.09	0.9	
9/19/2019	273,120	1.19	3.3	
9/20/2019	138,240	1.52	1.5	
9/21/2019	0	1.42	-	no consumption
9/22/2019	52,940	1.25	0.5	
9/23/2019	83,290	1.09	0.9	
9/24/2019	251,470	1.00	2.8	
9/25/2019	31,950	0.80	0.3	
9/26/2019	110,160	1.17	1.2	
9/27/2019	200,670	1.06	2.3	
9/28/2019	940	0.96	-	no consumption
9/29/2019	0	1.01	-	no consumption
9/30/2019	0	1.08	-	no consumption
Sum	2,713,907		32.4	
Average	90,464	1.2	1.1	
Max		1.5		

Monthly Fluoride Report System Type - Fluoride Systems		System Information			
System Name: Greater Augusta Utility District		Treatment plant: Triangle Station			
PWSID#: 90080		Chemical Used: Sodium Fluoride			
Reporting period: September, 2019		Notes: See notes below for specific operating conditions.			
Signature:  10/7/2019		Date	GAUD mg/L	Location	HETL mg/L
		9/24/19 1:20 PM	0.71	Quality Inn & Suites	0.7

Fluoride					Operating comments
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation	
units:	Mgals	gallons	mg/L	mg/L	
1	1.07	38	0.73	0.63	
2	0.91	34	0.75	0.68	
3	1.33	46	0.70	0.62	
4	1.26	46	0.66	0.65	
5	1.02	37	0.64	0.66	
6	1.39	49	0.65	0.63	
7	0.91	33	0.65	0.65	
8	1.04	39	0.64	0.67	
9	1.24	44	0.66	0.65	
10	1.31	47	0.66	0.65	
11	1.12	41	0.71	0.66	
12	1.27	47	0.71	0.66	
13	1.10	35	0.70	0.57	
14	1.00	39	0.72	0.69	
15	0.98	36	0.77	0.67	
16	1.19	43	0.74	0.65	
17	1.25	45	0.70	0.65	
18	1.13	40	0.71	0.64	
19	1.20	40	0.68	0.60	
20	1.71	63	0.67	0.66	
21	1.73	62	0.65	0.65	
22	1.38	51	0.64	0.67	
23	1.57	56	0.63	0.65	
24	2.06	76	0.63	0.66	
25	2.18	79	0.62	0.65	
26	1.17	38	0.63	0.58	
27	1.68	57	0.66	0.61	
28	0.91	33	0.69	0.64	
29	0.87	32	0.70	0.67	
30	1.15	42	0.75	0.65	
Avg	1.27	45.58	0.68	0.65	
Min	0.87	32.49	0.62	0.57	
Max	2.18	79.30	0.77	0.69	
Total	38.14	1,367.52			

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: Riverside Station			
System Name: Greater Augusta Utility District		Chemical Used: Sodium Fluoride			
PWSID#: 90080		Notes: See notes below for specific operating conditions.			
Reporting period: September, 2019		Date	GAUD mg/L	Location	HETL mg/L
Signature:  10/7/2019		9/24/2019 10:30	0.66	12 Williams Street	0.6

Fluoride					Operating comments
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation	
units:	Mgals	gallons	mg/L	mg/L	
1	0.62	17	0.72	0.49	
2	0.61	18	0.71	0.53	
3	0.59	14	0.70	0.43	
4	0.64	18	0.70	0.50	
5	0.74	21	0.72	0.51	
6	0.62	18	0.74	0.53	
7	0.63	18	0.75	0.51	
8	0.56	16	0.75	0.51	
9	0.71	20	0.69	0.50	
10	0.70	21	0.65	0.54	
11	0.64	18	0.66	0.51	
12	0.63	18	0.69	0.52	
13	0.72	18	0.66	0.45	
14	0.56	16	0.67	0.52	
15	0.65	19	0.66	0.53	
16	0.70	20	0.66	0.52	
17	0.62	18	0.67	0.52	
18	0.63	18	0.68	0.51	
19	0.65	18	0.67	0.50	
20	0.88	24	0.65	0.49	
21	0.48	14	0.66	0.53	
22	0.68	20	0.67	0.53	
23	0.36	9	0.65	0.45	
24	0.66	20	0.66	0.55	
25	0.87	26	0.68	0.54	
26	0.48	14	0.68	0.53	
27	0.88	26	0.68	0.53	
28	0.56	17	0.68	0.55	
29	0.59	18	0.68	0.55	
30	0.45	13	0.72	0.51	
Avg	0.64	18.17	0.69	0.51	
Min	0.36	9.00	0.65	0.43	
Max	0.88	26.00	0.75	0.55	
Total	19.10	545.00			

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period: September, 2019			
Date: October 4, 2019			
Signature: 			

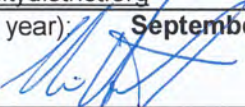
Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.72	0.00	0.35	1.07	0.00	0.62	0.62	1.69
2	0.77	0.00	0.14	0.91	0.00	0.61	0.61	1.52
3	0.40	0.14	0.79	1.33	0.00	0.59	0.59	1.92
4	0.00	0.40	0.86	1.26	0.00	0.64	0.64	1.91
5	0.00	0.12	0.90	1.02	0.00	0.74	0.74	1.76
6	0.00	0.48	0.91	1.39	0.00	0.62	0.62	2.01
7	0.00	0.15	0.76	0.91	0.00	0.63	0.63	1.54
8	0.00	0.14	0.91	1.04	0.00	0.56	0.56	1.60
9	0.00	0.09	1.15	1.24	0.00	0.71	0.71	1.95
10	0.00	0.44	0.87	1.31	0.00	0.70	0.70	2.02
11	0.00	0.24	0.88	1.12	0.00	0.64	0.64	1.76
12	0.00	0.41	0.86	1.27	0.00	0.63	0.63	1.89
13	0.00	0.17	0.93	1.10	0.00	0.72	0.72	1.82
14	0.29	0.12	0.59	1.00	0.00	0.56	0.56	1.56
15	0.98	0.00	0.00	0.98	0.00	0.65	0.65	1.63
16	0.52	0.14	0.54	1.19	0.00	0.70	0.70	1.89
17	0.00	0.41	0.84	1.25	0.00	0.62	0.62	1.87
18	0.00	0.22	0.91	1.13	0.00	0.63	0.63	1.76
19	0.00	0.34	0.86	1.20	0.00	0.65	0.65	1.84
20	0.00	0.58	1.13	1.71	0.00	0.88	0.88	2.60
21	0.00	0.60	1.13	1.73	0.00	0.48	0.48	2.20
22	0.00	0.30	1.07	1.38	0.00	0.68	0.68	2.06
23	0.09	0.60	0.87	1.57	0.00	0.36	0.36	1.93
24	0.59	0.51	0.96	2.06	0.00	0.66	0.66	2.71
25	0.62	0.49	1.07	2.18	0.00	0.87	0.87	3.05
26	0.95	0.08	0.13	1.17	0.00	0.48	0.48	1.65
27	0.54	0.45	0.69	1.68	0.00	0.88	0.88	2.57
28	0.78	0.00	0.13	0.91	0.00	0.56	0.56	1.47
29	0.71	0.00	0.16	0.87	0.00	0.59	0.59	1.46
30	0.95	0.00	0.19	1.15	0.00	0.45	0.45	1.60
Sum	8.90	7.64	21.59	38.14	0.00	19.10	19.10	57.23

67% Triangle
33% Riverside

MGD
1.27

MGD
0.64

MGD
1.91

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026 btarbuck@greataugustautilitydistrict.org		
Reporting period (month and year):	September - 19		
Date:	October 4, 2019		
Signature:			

Water production, pH and free chlorine residual							Chemical usage					
Triangle Station				Riverside Station			Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH	Average free chlorine residual	Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	1.07	7.55	1.28	0.62	7.57	1.19	3	14		1.7	8	
2	0.91	7.57	1.30	0.61	7.57	1.18	2	11		1.7	8	
3	1.33	7.58	1.28	0.59	7.57	1.18	3	16		1.6	8	50
4	1.26	7.59	1.28	0.64	7.57	1.17	2	16		1.7	8	
5	1.02	7.56	1.24	0.74	7.57	1.12	3	12		2.0	9	
6	1.39	7.57	1.32	0.62	7.57	1.14	3	17	50	1.7	8	
7	0.91	7.56	1.29	0.63	7.57	1.17	2	11		1.8	8	
8	1.04	7.55	1.30	0.56	7.58	1.17	2	12		1.5	7	
9	1.24	7.52	1.32	0.71	7.58	1.17	3	15		1.9	9	
10	1.31	7.54	1.29	0.70	7.58	1.16	3	15		1.9	9	
11	1.12	7.58	1.27	0.64	7.58	1.16	2	14		1.7	8	
12	1.27	7.57	1.28	0.63	7.58	0.98	2	15		1.7	7	
13	1.10	7.52	1.29	0.72	7.58	1.02	3	13	100	1.9	8	50
14	1.00	7.56	1.25	0.56	7.58	1.06	2	12		1.5	6	
15	0.98	7.65	1.22	0.65	7.58	1.05	2	12		1.7	7	
16	1.19	7.62	1.26	0.70	7.58	1.02	2	15		1.9	8	
17	1.25	7.58	1.28	0.62	7.58	1.05	3	15		1.6	7	
18	1.13	7.52	1.30	0.63	7.59	1.10	3	13		1.7	8	
19	1.20	7.52	1.29	0.65	7.59	1.10	2	15	100	1.7	8	
20	1.71	7.56	1.31	0.88	7.59	1.08	4	21		2.3	10	50
21	1.73	7.59	1.30	0.48	7.58	1.06	4	20		1.2	6	
22	1.38	7.59	1.30	0.68	7.57	1.06	3	17		1.8	8	
23	1.57	7.61	1.26	0.36	7.56	1.07	3	19		0.8	4	
24	2.06	7.62	1.25	0.66	7.56	1.14	4	24		1.6	8	
25	2.18	7.58	1.25	0.87	7.58	1.13	5	26		2.0	10	
26	1.17	7.61	1.24	0.48	7.58	1.13	3	14	100	1.1	6	
27	1.68	7.59	1.20	0.88	7.59	1.13	3	20		2.1	11	
28	0.91	7.59	1.21	0.56	7.60	1.09	2	11		1.3	7	
29	0.87	7.59	1.22	0.59	7.60	1.01	2	11		1.4	7	
30	1.15	7.54	1.24	0.45	7.61	1.08	3	14		1.1	5	
Summary	38.14	7.57	1.20	19.10	7.58	0.98	84	463	350	50	230	150
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)					
	Chemical Name	Purpose	Chemical Strength	Total	Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	133	gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	693	gallons
NaF	Sodium fluoride	fluoridation		500	pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
# of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.75

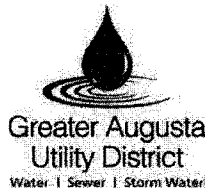
Brian Tarbuck, General Manager
btarbuck@greateraugustautilitydistrict.org

Ken Knight, Board Chair
kknight@greateraugustautilitydistrict.org

Charlotte Warren, Hallowell voting member
cwarren@greateraugustautilitydistrict.org

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ccolwell@greateraugustautilitydistrict.org

November 6, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of October, 2019.

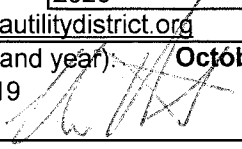
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

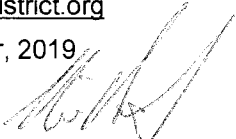
Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period (month and year): October - 19			
Date: November 6, 2019			
Signature: 			

Date	Water production, pH and free chlorine residual						Chemical usage					
	Triangle Station			Riverside Station			Triangle Station			Riverside Station		
	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH	Average free chlorine residual	Calc gal	Hypo gal	NaF lbs	Calc gal	Hypo gal	NaF lbs
1	1.17	7.57	1.22	0.61	7.62	1.13	2.0	14		1.4	8	50
2	0.93	7.59	1.22	0.62	7.63	1.15	1.8	12		1.5	8	
3	1.33	7.53	1.24	0.58	7.64	1.16	3.1	16		1.4	8	
4	1.14	7.54	1.25	0.76	7.64	1.15	2.4	14		1.7	10	
5	0.93	7.51	1.25	0.64	7.65	1.14	2.0	12		1.5	8	
6	0.79	7.52	1.27	0.57	7.65	1.12	2.0	10		1.3	7	
7	1.38	7.57	1.26	0.61	7.65	1.10	3.0	18	50	1.4	8	
8	1.06	7.56	1.25	0.68	7.65	1.17	2.0	13		1.6	9	
9	1.20	7.53	1.26	0.54	7.66	1.26	3.0	15		1.3	7	50
10	1.04	7.53	1.25	0.55	7.66	0.93	2.0	13		1.3	6	
11	1.00	7.54	1.28	0.57	7.66	1.10	2.0	13	50	1.3	6	
12	0.79	7.55	1.31	0.54	7.66	1.17	2.0	10		1.3	6	
13	0.96	7.56	1.33	0.66	7.67	1.22	2.0	13		1.5	8	
14	1.06	7.56	1.33	0.43	7.67	1.24	3.0	13		1.0	5	
15	0.60	7.56	1.30	0.72	7.67	1.26	1.0	8	50	1.7	9	
16	1.86	7.56	1.37	0.29	7.68	1.22	4.0	24		0.7	4	
17	1.55	7.61	1.38	0.00	7.67	1.18	3.0	19		0.1	0	
18	1.52	7.58	1.30	0.00	7.67	1.13	3.0	19		0.1	1	
19	1.56	7.54	1.27	0.00	7.66	1.12	3.2	18		-	1	
20	1.42	7.52	1.28	0.00	7.66	1.11	3.0	16		0.1	1	
21	1.22	7.53	1.27	0.58	7.67	1.15	2.0	15		1.4	8	
22	0.96	7.55	1.26	0.42	7.68	1.09	3.0	11		0.9	6	
23	0.95	7.61	1.26	0.63	7.68	1.14	2.1	12	100	1.5	8	
24	0.95	7.59	1.25	0.60	7.67	0.78	2.0	11		1.3	7	
25	0.95	7.59	1.24	0.56	7.69	1.15	2.0	11	100	1.3	7	
26	0.95	7.56	1.25	0.43	7.68	1.13	2.0	12		1.1	5	
27	0.95	7.55	1.25	0.36	7.69	1.13	2.0	11		0.8	4	
28	1.06	7.59	1.12	0.66	7.69	1.12	1.4	12		1.5	8	100
29	1.12	7.57	1.23	0.47	7.69	1.11	3.0	13		1.1	6	
30	1.14	7.57	1.26	0.48	7.69	1.11	2.0	13		1.2	6	
31	1.15	7.59	1.26	0.43	7.69	1.11	2.0	13		1.0	6	
Summary	34.70	7.56	1.12	15.00	7.67	0.78	73	427	350	35	193	200
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calciquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	108 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	620 gallons
NaF	Sodium fluoride	fluoridation		550 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.76

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period:	October, 2019		
Date:	November 6, 2019		
Signature:			

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.95	0.00	0.21	1.17	0.00	0.61	0.61	1.78
2	0.75	0.00	0.18	0.93	0.00	0.62	0.62	1.55
3	0.76	0.00	0.57	1.33	0.00	0.58	0.58	1.91
4	0.71	0.00	0.43	1.14	0.00	0.76	0.76	1.90
5	0.62	0.00	0.31	0.93	0.00	0.64	0.64	1.57
6	0.76	0.00	0.03	0.79	0.00	0.57	0.57	1.36
7	0.95	0.00	0.43	1.38	0.00	0.61	0.61	1.99
8	0.70	0.00	0.36	1.06	0.00	0.68	0.68	1.74
9	0.71	0.00	0.49	1.20	0.00	0.54	0.54	1.74
10	0.65	0.00	0.40	1.04	0.00	0.55	0.55	1.59
11	0.80	0.00	0.20	1.00	0.00	0.57	0.57	1.57
12	0.65	0.00	0.14	0.79	0.00	0.54	0.54	1.33
13	0.95	0.00	0.00	0.96	0.00	0.66	0.66	1.62
14	0.95	0.00	0.11	1.06	0.00	0.43	0.43	1.49
15	0.26	0.00	0.34	0.60	0.00	0.72	0.72	1.33
16	0.61	0.52	0.73	1.86	0.00	0.29	0.29	2.15
17	0.93	0.61	0.00	1.55	0.00	0.00	0.00	1.55
18	0.93	0.59	0.00	1.52	0.00	0.00	0.00	1.52
19	0.92	0.63	0.00	1.56	0.00	0.00	0.00	1.56
20	0.93	0.48	0.00	1.42	0.00	0.00	0.00	1.42
21	0.94	0.28	0.00	1.22	0.00	0.58	0.58	1.81
22	0.96	0.00	0.00	0.96	0.00	0.42	0.42	1.38
23	0.95	0.00	0.00	0.95	0.00	0.63	0.63	1.59
24	0.95	0.00	0.00	0.95	0.00	0.60	0.60	1.55
25	0.95	0.00	0.00	0.95	0.00	0.56	0.56	1.51
26	0.94	0.00	0.00	0.95	0.00	0.43	0.43	1.38
27	0.94	0.00	0.00	0.95	0.00	0.36	0.36	1.31
28	0.38	0.00	0.68	1.06	0.00	0.66	0.66	1.72
29	0.00	0.00	1.12	1.12	0.00	0.47	0.47	1.59
30	0.00	0.00	1.14	1.14	0.00	0.48	0.48	1.62
31	0.00	0.00	1.14	1.15	0.00	0.43	0.43	1.58
Sum	22.50	3.15	9.05	34.70	0.00	15.00	15.00	49.70

70% Triangle

MGD

MGD

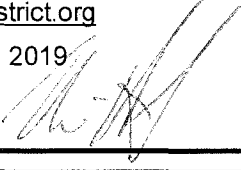
MGD

30% Riverside

1.12

0.48

1.60

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greteraugustautilitydistrict.org			
Reporting period:	October, 2019		
Date:	November 6, 2019		
Signature:			

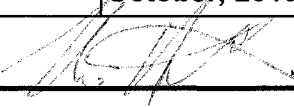
Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.95	0.00	0.21	1.17	0.00	0.61	0.61	1.78
2	0.75	0.00	0.18	0.93	0.00	0.62	0.62	1.55
3	0.76	0.00	0.57	1.33	0.00	0.58	0.58	1.91
4	0.71	0.00	0.43	1.14	0.00	0.76	0.76	1.90
5	0.62	0.00	0.31	0.93	0.00	0.64	0.64	1.57
6	0.76	0.00	0.03	0.79	0.00	0.57	0.57	1.36
7	0.95	0.00	0.43	1.38	0.00	0.61	0.61	1.99
8	0.70	0.00	0.36	1.06	0.00	0.68	0.68	1.74
9	0.71	0.00	0.49	1.20	0.00	0.54	0.54	1.74
10	0.65	0.00	0.40	1.04	0.00	0.55	0.55	1.59
11	0.80	0.00	0.20	1.00	0.00	0.57	0.57	1.57
12	0.65	0.00	0.14	0.79	0.00	0.54	0.54	1.33
13	0.95	0.00	0.00	0.96	0.00	0.66	0.66	1.62
14	0.95	0.00	0.11	1.06	0.00	0.43	0.43	1.49
15	0.26	0.00	0.34	0.60	0.00	0.72	0.72	1.33
16	0.61	0.52	0.73	1.86	0.00	0.29	0.29	2.15
17	0.93	0.61	0.00	1.55	0.00	0.00	0.00	1.55
18	0.93	0.59	0.00	1.52	0.00	0.00	0.00	1.52
19	0.92	0.63	0.00	1.56	0.00	0.00	0.00	1.56
20	0.93	0.48	0.00	1.42	0.00	0.00	0.00	1.42
21	0.94	0.28	0.00	1.22	0.00	0.58	0.58	1.81
22	0.96	0.00	0.00	0.96	0.00	0.42	0.42	1.38
23	0.95	0.00	0.00	0.95	0.00	0.63	0.63	1.59
24	0.95	0.00	0.00	0.95	0.00	0.60	0.60	1.55
25	0.95	0.00	0.00	0.95	0.00	0.56	0.56	1.51
26	0.94	0.00	0.00	0.95	0.00	0.43	0.43	1.38
27	0.94	0.00	0.00	0.95	0.00	0.36	0.36	1.31
28	0.38	0.00	0.68	1.06	0.00	0.66	0.66	1.72
29	0.00	0.00	1.12	1.12	0.00	0.47	0.47	1.59
30	0.00	0.00	1.14	1.14	0.00	0.48	0.48	1.62
31	0.00	0.00	1.14	1.15	0.00	0.43	0.43	1.58
Sum	22.50	3.15	9.05	34.70	0.00	15.00	15.00	49.70

70% Triangle
30% Riverside

MGD
1.12

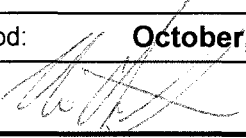
MGD
0.48

MGD
1.60

Monthly Fluoride Report		System Information			
System Type - Fluoride Systems		Treatment plant: Triangle Station			
System Name: Greater Augusta Utility District		Chemical Used: Sodium Fluoride			
PWSID#: 90080					
Reporting period: October, 2019		Notes: See notes below for specific operating conditions.			
Signature: 		Date	GAUD mg/L	Location	HETL mg/L
11/6/2019		10/8/19 8:30 AM	0.56	12 Williams Street	0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	1.17	41	0.75	0.64
2	0.93	33	0.74	0.65
3	1.33	49	0.76	0.66
4	1.14	40	0.70	0.64
5	0.93	34	0.68	0.66
6	0.79	28	0.69	0.64
7	1.38	48	0.66	0.63
8	1.06	38	0.73	0.65
9	1.20	43	0.71	0.64
10	1.04	38	0.67	0.65
11	1.00	33	0.68	0.59
12	0.79	28	0.67	0.64
13	0.96	36	0.66	0.67
14	1.06	38	0.65	0.64
15	0.60	19	0.64	0.57
16	1.86	67	0.63	0.65
17	1.55	55	0.67	0.64
18	1.52	55	0.75	0.66
19	1.56	54	0.82	0.63
20	1.42	51	0.82	0.65
21	1.22	44	0.76	0.64
22	0.96	35	0.65	0.66
23	0.95	30	0.73	0.57
24	0.95	34	0.82	0.65
25	0.95	28	0.76	0.54
26	0.95	31	0.74	0.60
27	0.95	29	0.72	0.55
28	1.06	33	0.67	0.56
29	1.12	36	0.63	0.57
30	1.14	36	0.68	0.57
31	1.15	37	0.70	0.58
Avg	1.12	38.80	0.71	0.62
Min	0.60	19.19	0.63	0.54
Max	1.86	66.81	0.82	0.67
Total	34.70	1,202.80		

Operating comments

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: <u>Riverside Station</u>	
System Name:	Greater Augusta Utility District	Chemical Used: <u>Sodium Fluoride</u>	
PWSID#: 90080			
Reporting period: October, 2019		Notes: See notes below for specific operating conditions.	
Signature: 	11/6/2019	Date	GAUD mg/L
		10/8/2019 13:25	0.67
		Location	HETL mg/L
		Quality Inn & Suites	0.7

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.61	16	0.71	0.47
2	0.62	18	0.72	0.52
3	0.58	18	0.68	0.56
4	0.76	23	0.63	0.54
5	0.64	19	0.63	0.53
6	0.57	17	0.62	0.54
7	0.61	19	0.59	0.56
8	0.68	20	0.59	0.53
9	0.54	14	0.62	0.47
10	0.55	16	0.64	0.53
11	0.57	17	0.66	0.54
12	0.54	17	0.65	0.57
13	0.66	20	0.65	0.54
14	0.43	13	0.64	0.55
15	0.72	23	0.65	0.57
16	0.29	9	0.66	0.57
17	0.00	0	0.60	
18	0.00	0	0.58	
19	0.00	0	0.58	
20	0.00	0	0.58	
21	0.58	18	0.58	0.56
22	0.42	14	0.59	0.61
23	0.63	20	0.65	0.57
24	0.60	19	0.60	0.57
25	0.56	19	0.64	0.61
26	0.43	14	0.64	0.58
27	0.36	13	0.64	0.65
28	0.66	19	0.63	0.52
29	0.47	16	0.68	0.61
30	0.48	16	0.72	0.61
31	0.43	14	0.72	0.58
Avg	0.48	14.87	0.64	0.56
Min	0.00	0.00	0.58	0.47
Max	0.76	23.00	0.72	0.65
Total	14.99	461.00		

Operating comments

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: October, 2019

Reporting date: 11/6/2019

Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
10/1/2019	92,110	1.14	1.0	
10/2/2019	77,140	1.18	1.0	
10/3/2019	88,230	1.29	1.0	
10/4/2019	330,620	1.23	3.8	
10/5/2019	68,580	1.51	0.7	
10/6/2019	68,850	1.40	0.8	
10/7/2019	157,890	1.20	1.9	
10/8/2019	74,730	1.09	0.8	
10/9/2019	72,060	1.28	0.8	
10/10/2019	78,080	1.56	0.8	
10/11/2019	78,470	1.42	0.9	
10/12/2019	64,170	1.44	0.7	
10/13/2019	65,780	1.44	0.8	
10/14/2019	10,960	1.52	0.2	
10/15/2019	123,260	1.41	1.2	
10/16/2019	74,730	1.65	0.8	
10/17/2019	76,470	1.40	0.8	
10/18/2019	70,320	1.53	0.7	
10/19/2019	65,650	1.50	0.6	
10/20/2019	66,840	1.54	0.6	
10/21/2019	72,060	1.70	0.7	
10/22/2019	74,200	1.63	0.6	
10/23/2019	81,680	1.26	0.7	
10/24/2019	71,800	1.42	0.5	
10/25/2019	132,750	1.50	2.8	
10/26/2019	0	1.73	-	no consumption
10/27/2019	63,230	1.52	0.5	
10/28/2019	72,600	1.53	0.6	
10/29/2019	74,060	1.51	0.6	
10/30/2019	74,070	1.52	0.6	
10/31/2019	131,680	1.22	1.1	
Sum	2,653,070		28.7	
Average	85,583	1.4	0.9	
Max		1.7		

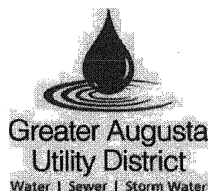
Brian Tarbuck, General Manager
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ccolwell@greateraugustautilitydistrict.org

December 9, 2019

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of November, 2019.

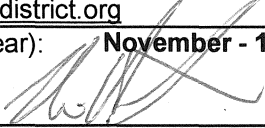
You should find the following documents:

1. Operating report;
2. Water production report;
3. Triangle fluoridation report
4. Riverside fluoridation report; and
5. Togus disinfection report.

If you have any questions, please contact me at 622-3701.

Sincerely,

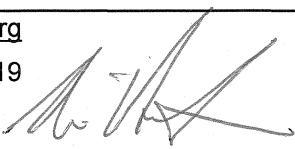
Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name	Brian Tarbuck		
and ME License #:	2026		
btarbuck@greateraugustautilitydistrict.org			
Reporting period (month and year): November - 19			
Date: December 9, 2019			
Signature: 			

	Water production, pH and free chlorine residual						Chemical usage					
	Triangle Station			Riverside Station			Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons	pH	Average free chlorine residual	Calc	Hypo	NaF	Calc	Hypo	NaF
				(MGD)			gal	gal	lbs	gal	gal	lbs
1	1.01	7.60	1.25	0.53	7.29	1.00	2	12		1.2	7	
2	1.14	7.53	1.28	0.42	7.69	1.06	3	13		1.0	5	
3	1.14	7.53	1.29	0.39	7.69	1.04	2	14		0.9	5	
4	1.14	7.56	1.26	0.77	7.69	1.22	2	13	100	1.8	9	
5	1.14	7.57	1.26	0.74	7.70	1.29	2	13		1.7	9	
6	1.14	7.57	1.25	0.71	7.70	1.19	3	13		1.6	9	
7	1.13	7.57	1.24	0.65	7.71	1.00	2	13		1.5	8	50
8	1.14	7.57	1.05	0.51	7.71	1.09	2	13		1.2	6	
9	0.94	7.52	1.22	0.38	7.71	1.10	2	10		0.9	5	
10	1.13	7.53	1.21	0.30	7.70	1.04	3	13		0.7	4	
11	1.13	7.56	1.16	0.54	7.71	1.07	2	13		0.8	7	
12	0.94	7.58	1.12	0.57	7.71	1.02	2	11	100	1.4	7	
13	0.89	7.56	1.09	0.67	7.70	1.06	2	10		1.6	8	
14	1.12	7.55	1.10	0.68	7.70	1.08	2	12		1.5	8	
15	1.11	7.57	1.08	0.69	7.71	1.06	2	13		1.6	9	
16	1.11	7.52	1.09	0.53	7.71	1.02	2	12		1.2	7	
17	1.11	7.53	1.08	0.72	7.71	1.01	3	13		1.7	9	
18	0.91	7.66	1.11	0.67	7.72	1.00	1	10		1.5	8	
19	0.93	7.69	1.22	0.73	7.72	0.98	2	11		1.7	9	50
20	0.92	7.68	1.21	0.66	7.72	0.96	2	11		1.5	8	
21	0.92	7.67	1.21	0.69	7.73	1.00	2	10		1.6	8	
22	0.92	7.68	1.26	0.71	7.73	1.13	2	11	100	1.6	9	
23	0.91	7.64	1.30	0.69	7.74	1.14	2	11		1.6	8	
24	0.91	7.65	1.28	0.50	7.74	1.11	2	10		1.1	6	
25	0.91	7.68	1.25	0.71	7.74	1.10	2	11		1.6	9	50
26	0.92	7.67	1.25	0.75	7.74	1.10	2	10		1.7	9	
27	0.92	7.67	1.25	0.57	7.73	0.83	2	11	100	1.5	8	
28	0.91	7.67	1.24	0.55	7.74	1.25	2	11		1.5	8	
29	1.00	7.65	1.20	0.64	7.74	1.24	2	11		1.7	9	
30	0.91	7.62	1.25	0.49	7.74	1.23	2	10		1.3	7	
Summary	30.46	7.60	1.25	18.18	7.70	0.83	63	351	400	42	227	150
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calcquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	106 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	578 gallons
NaF	Sodium fluoride	fluoridation		550 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.74

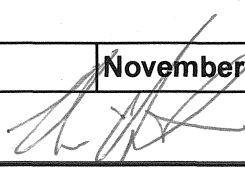
Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period: November, 2019			
Date: December 9, 2019			
Signature: 			

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.00	0.00	1.01	1.01	0.00	0.53	0.53	1.54
2	0.00	0.00	1.14	1.14	0.00	0.42	0.42	1.56
3	0.00	0.00	1.14	1.14	0.00	0.39	0.39	1.53
4	0.00	0.00	1.14	1.14	0.00	0.77	0.77	1.92
5	0.00	0.00	1.14	1.14	0.00	0.74	0.74	1.89
6	0.00	0.00	1.14	1.14	0.00	0.71	0.71	1.85
7	0.00	0.00	1.13	1.13	0.00	0.65	0.65	1.78
8	0.00	0.00	1.13	1.14	0.00	0.51	0.51	1.65
9	0.00	0.00	0.94	0.94	0.00	0.38	0.38	1.32
10	0.00	0.00	1.13	1.13	0.00	0.30	0.30	1.42
11	0.00	0.00	1.13	1.13	0.00	0.54	0.54	1.67
12	0.00	0.00	0.94	0.94	0.00	0.57	0.57	1.51
13	0.00	0.00	0.89	0.89	0.00	0.67	0.67	1.56
14	0.00	0.00	1.12	1.12	0.00	0.68	0.68	1.80
15	0.00	0.00	1.11	1.11	0.00	0.69	0.69	1.81
16	0.00	0.00	1.11	1.11	0.00	0.53	0.53	1.64
17	0.00	0.00	1.11	1.11	0.00	0.72	0.72	1.82
18	0.00	0.60	0.32	0.91	0.00	0.67	0.67	1.59
19	0.00	0.93	0.00	0.93	0.00	0.73	0.73	1.66
20	0.00	0.92	0.00	0.92	0.00	0.66	0.66	1.58
21	0.00	0.92	0.00	0.92	0.00	0.69	0.69	1.62
22	0.00	0.92	0.00	0.92	0.00	0.71	0.71	1.63
23	0.00	0.91	0.00	0.91	0.00	0.69	0.69	1.61
24	0.00	0.91	0.00	0.91	0.00	0.50	0.50	1.41
25	0.00	0.91	0.00	0.91	0.00	0.71	0.71	1.62
26	0.00	0.92	0.00	0.92	0.00	0.75	0.75	1.67
27	0.00	0.92	0.00	0.92	0.00	0.57	0.57	1.49
28	0.00	0.91	0.00	0.91	0.00	0.55	0.55	1.46
29	0.00	0.69	0.31	1.00	0.00	0.64	0.64	1.64
30	0.00	0.91	0.00	0.91	0.00	0.49	0.49	1.40
Sum	0.00	11.36	19.10	30.46	0.00	18.18	18.18	48.64

63% Triangle
37% Riverside

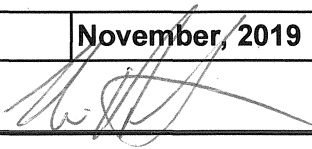
MGD
1.02

MGD
0.61 1.62

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Triangle Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period:	November, 2019	Date	GAUD mg/L
Signature: 		11/6/2019 13:45	0.64
12/9/2019		Location	HETL mg/L
		Quality Inn and Suites	0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	1.01	31	0.74	0.55
2	1.14	36	0.82	0.57
3	1.14	37	0.78	0.58
4	1.14	30	0.73	0.47
5	1.14	35	0.71	0.55
6	1.14	36	0.72	0.56
7	1.13	34	0.72	0.54
8	1.14	35	0.72	0.55
9	0.94	29	0.76	0.55
10	1.13	34	0.76	0.54
11	1.13	34	0.71	0.54
12	0.94	24	0.74	0.47
13	0.89	27	0.73	0.55
14	1.12	33	0.73	0.53
15	1.11	34	0.73	0.55
16	1.11	32	0.78	0.52
17	1.11	33	0.78	0.54
18	0.91	28	0.74	0.55
19	0.93	26	0.75	0.51
20	0.92	28	0.68	0.54
21	0.92	27	0.62	0.53
22	0.92	21	0.63	0.42
23	0.91	27	0.66	0.54
24	0.91	26	0.66	0.51
25	0.91	27	0.68	0.54
26	0.92	26	0.72	0.51
27	0.92	23	0.79	0.46
28	0.91	26	0.75	0.51
29	1.00	29	0.74	0.53
30	0.91	24	0.76	0.48
Avg	1.02	29.80	0.73	0.53
Min	0.89	21.35	0.62	0.42
Max	1.14	36.90	0.82	0.58
Total	30.46	894.00		

Operating comments

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Riverside Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period:	November, 2019	Date	GAUD mg/L
Signature: 		11/6/2019 10:30	0.76
12/9/2019		Location	HETL mg/L
		12 Williams Street	0.7

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.53	17	0.70	0.58
2	0.42	14	0.74	0.60
3	0.39	13	0.74	0.60
4	0.77	26	0.75	0.61
5	0.74	24	0.73	0.58
6	0.71	24	0.75	0.61
7	0.65	19	0.75	0.53
8	0.51	17	0.75	0.59
9	0.38	13	0.74	0.62
10	0.30	10	0.74	0.61
11	0.54	11	0.60	0.37
12	0.57	20	0.76	0.63
13	0.67	22	0.72	0.59
14	0.68	23	0.73	0.61
15	0.69	23	0.74	0.60
16	0.53	18	0.73	0.61
17	0.72	24	0.74	0.60
18	0.67	23	0.67	0.62
19	0.73	22	0.63	0.54
20	0.66	23	0.66	0.63
21	0.69	23	0.67	0.60
22	0.71	24	0.66	0.61
23	0.69	23	0.66	0.60
24	0.50	16	0.64	0.58
25	0.71	21	0.61	0.53
26	0.75	25	0.64	0.60
27	0.57	19	0.66	0.60
28	0.55	18	0.66	0.58
29	0.64	22	0.67	0.62
30	0.49	16	0.66	0.59
Avg	0.61	19.77	0.70	0.59
Min	0.30	10.00	0.60	0.37
Max	0.77	26.00	0.76	0.63
Total	18.18	593.00		

Operating comments

Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: November, 2019

Reporting date: 12/9/2019

Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
11/1/2019	73,663	1.29	0.6	
11/2/2019	67,109	1.64	0.6	
11/3/2019	18,719	1.93	0.1	
11/4/2019	110,164	1.54	0.8	
11/5/2019	67,781	1.58	0.4	
11/6/2019	74,195	1.53	0.5	
11/7/2019	73,258	1.48	0.5	
11/8/2019	82,492	1.17	0.6	
11/9/2019	63,234	1.35	0.4	
11/10/2019	2,141	1.15	-	
11/11/2019	68,984	1.04	0.5	
11/12/2019	70,719	1.08	0.5	
11/13/2019	74,734	1.24	0.6	
11/14/2019	79,945	1.47	0.6	
11/15/2019	71,656	1.35	0.5	
11/16/2019	67,117	1.26	0.5	
11/17/2019	67,508	1.43	0.4	
11/18/2019	73,930	1.33	0.5	
11/19/2019	78,211	1.48	0.4	
11/20/2019	74,602	1.30	0.4	
11/21/2019	72,461	1.25	0.4	
11/22/2019	76,336	1.28	0.4	
11/23/2019	68,445	1.36	0.4	
11/24/2019	48,000	1.47	0.3	
11/25/2019	76,469	1.15	0.4	
11/26/2019	64,570	1.20	0.4	
11/27/2019	66,578	1.18	0.4	
11/28/2019	0	1.34	-	no consumption
11/29/2019	68,984	1.24	0.5	
11/30/2019	63,500	1.19	0.4	
Sum	1,965,507		13.3	
Average	65,517	1.3	0.4	
Max		1.9		

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January 9, 2020

Denise Douin
State of Maine, Drinking Water Program
11 State House Station
Augusta, ME 04333-0011

Dear Denise:

Please find attached the monthly reports for compliance with the Safe Drinking Water Act and Maine's Rules Relating to Drinking Water for the month of December, 2019.

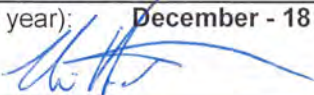
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1. Operating report;
2. Water production report;
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4. Riverside fluoridation report; and
5. Togus disinfection report.

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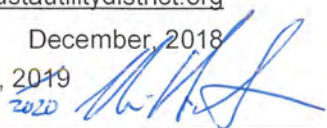
Brian Tarbuck, PE, System Class IV 2026

Monthly Operating Report		System Information	
System Type - All GW systems		Treatment plant/pump station: Triangle & Riverside	
System Name:	Greater Augusta Utility District	Community water system	
PWSID#:	90080	List any new or changed system information and any operational problems or comments below.	
Designated operator name and ME License #:	Brian Tarbuck 2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period (month and year): December - 18			
Date: January 9, 2019			
Signature: 			

Water production, pH and free chlorine residual							Chemical usage					
Triangle Station				Riverside Station			Triangle Station			Riverside Station		
Date	Gallons (MGD)	pH	Average free chlorine residual	Gallons (MGD)	pH	Average free chlorine residual	Calc	Hypo	NaF	Calc	Hypo	NaF
							gal	gal	lbs	gal	gal	lbs
1	0.91	7.62	1.24	0.56	7.74	1.23	2	11		1	8	
2	0.92	7.67	1.22	0.80	7.74	1.27	2	10		2	11	
3	0.92	7.69	1.20	0.59	7.72	1.26	2	11		2	8	
4	0.90	7.68	1.18	0.56	7.74	1.27	2	10		2	7	
5	0.97	7.67	1.25	0.59	7.74	1.22	2	11		2	7	
6	0.92	7.66	1.31	0.71	7.74	1.13	2	11		2	8	50
7	0.91	7.62	1.39	0.66	7.74	1.11	2	10		2	8	
8	0.91	7.61	1.38	0.57	7.73	1.09	2	11		2	7	
9	0.84	7.70	1.25	0.75	7.73	1.09	2	9		2	9	
10	0.98	7.74	1.20	0.52	7.56	1.10	1	11		1	5	
11	0.96	7.70	1.15	0.62	7.39	0.99	2	11		2	6	
12	0.96	7.66	1.08	0.54	7.38	0.94	3	10	50	1	5	
13	0.96	7.66	0.97	0.61	7.38	0.89	2	9		2	5	
14	0.85	7.66	0.91	0.46	7.39	0.85	1	7		1	4	
15	0.75	7.66	0.81	0.48	7.39	0.88	2	5		1	4	
16	0.64	7.65	0.64	0.75	7.38	0.88	1	4		2	7	
17	1.19	7.61	0.73	0.55	7.37	0.86	3	9		1	5	
18	0.73	7.64	1.03	0.66	7.38	0.89	1	7		2	6	
19	1.17	7.61	1.14	0.49	7.38	0.89	3	11	50	1	4	
20	0.93	7.59	1.07	0.59	7.38	0.91	1	9		1	5	
21	0.88	7.56	1.08	0.53	7.38	0.90	2	9		1	5	
22	0.68	7.58	1.07	0.50	7.38	0.89	1	7		1	4	
23	1.11	7.61	1.09	0.53	7.37	0.90	3	11		1	5	
24	1.10	7.61	1.11	0.44	7.37	0.87	2	10		1	4	50
25	0.30	7.61	0.99	0.66	7.37	0.89	1	4		2	6	
26	1.07	7.64	0.99	0.68	7.36	0.84	2	10		2	6	
27	0.92	7.67	1.05	0.49	7.37	0.82	2	9	50	1	5	
28	0.76	7.64	1.08	0.48	7.37	1.02	1	8		1	5	
29	0.76	7.63	1.09	0.63	7.37	1.03	2	7		2	6	
30	0.97	7.66	1.09	0.57	7.37	1.01	2	10		1	5	
31	0.61	7.67	1.06	0.73	7.38	1.01	1	6		2	7	
Summary	27.46	7.65	0.64	18.31	7.49	0.82	58	280	150	45	186	100
	Sum	Average	(min.)	Sum	Average	(min.)	(total)	(total)	(total)	(total)	(total)	(total)

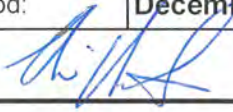
Chemicals Used (fluoride reported separately)				
	Chemical Name	Purpose	Chemical Strength	Total Units
Calc	Calcquest 75 / 25	calcium sequestration / Pb / Cu control	75% polyphosphate	102 gallons
Hypo	Sodium hypochlorite	primary and secondary disinfection	12.50%	466 gallons
NaF	Sodium fluoride	fluoridation		250 pounds

Summary of Total Coliform Bacteria Rule - please continue to submit complete results			
Number of routine samples taken:	28	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.69

Monthly Well Production Report		System Information	
System Type - All GW systems		Treatment plant/pump station: All wells	
System Name:	Greater Augusta Utility District	Community System	
PWSID#:	90080	List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):	
Designated operator name and ME	Brian Tarbuck		
License #:	2026		
btarbuck@greataugustautilitydistrict.org			
Reporting period:	December, 2018		
Date:	January 9, 2019		
Signature:			

Daily water production (MG)								
Date	Triangle Well	South Well	Brookside Well	Sum Triangle Station	Riverside South #1 HD-8	Riverside North #2 HD-7	Sum Riverside Station	Sum All wells
1	0.00	0.91	0.00	0.91	0.00	0.56	0.56	1.48
2	0.00	0.91	0.00	0.92	0.00	0.80	0.80	1.72
3	0.00	0.91	0.00	0.92	0.00	0.59	0.59	1.51
4	0.00	0.69	0.21	0.90	0.00	0.56	0.56	1.46
5	0.00	0.91	0.06	0.97	0.00	0.59	0.59	1.55
6	0.00	0.91	0.00	0.92	0.00	0.71	0.71	1.62
7	0.00	0.91	0.01	0.91	0.00	0.66	0.66	1.58
8	0.00	0.91	0.01	0.91	0.00	0.56	0.57	1.48
9	0.54	0.29	0.00	0.84	0.00	0.75	0.75	1.59
10	0.97	0.00	0.01	0.98	0.52	0.01	0.52	1.50
11	0.96	0.00	0.01	0.96	0.62	0.00	0.62	1.59
12	0.96	0.00	0.01	0.96	0.54	0.00	0.54	1.50
13	0.95	0.00	0.01	0.96	0.61	0.00	0.61	1.57
14	0.84	0.00	0.01	0.85	0.46	0.00	0.46	1.31
15	0.74	0.00	0.00	0.75	0.48	0.00	0.48	1.23
16	0.29	0.13	0.22	0.64	0.75	0.00	0.75	1.39
17	0.00	0.23	0.95	1.19	0.55	0.00	0.55	1.73
18	0.00	0.23	0.50	0.73	0.66	0.00	0.66	1.39
19	0.00	0.07	1.10	1.17	0.49	0.00	0.49	1.66
20	0.00	0.26	0.68	0.93	0.59	0.00	0.59	1.52
21	0.00	0.31	0.57	0.88	0.53	0.00	0.53	1.41
22	0.00	0.09	0.59	0.68	0.50	0.00	0.50	1.17
23	0.00	0.00	1.11	1.11	0.53	0.00	0.53	1.64
24	0.00	0.00	1.10	1.10	0.44	0.00	0.44	1.55
25	0.00	0.00	0.30	0.30	0.66	0.00	0.66	0.96
26	0.24	0.47	0.37	1.07	0.68	0.00	0.68	1.76
27	0.34	0.57	0.00	0.92	0.49	0.00	0.49	1.41
28	0.27	0.49	0.00	0.76	0.48	0.00	0.48	1.24
29	0.23	0.52	0.00	0.76	0.63	0.00	0.63	1.40
30	0.40	0.56	0.00	0.97	0.57	0.00	0.57	1.54
31	0.26	0.34	0.00	0.61	0.73	0.00	0.73	1.33
Sum	8.00	11.61	7.85	27.46	0.00	5.79	18.31	45.77

60% Triangle	MGD	MGD	MGD
40% Riverside	0.89	0.59	1.48

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Triangle Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080			
Reporting period:	December, 2019	Notes: See notes below for specific operating conditions.	
Signature: 	1/9/2020	Date	GAUD mg/L
		12/18/2019 13:35	0.68
		Location	HETL mg/L
		Quality Inn & Suites	0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.91	22	0.72	0.43
2	0.92	24	0.66	0.46
3	0.92	25	0.68	0.50
4	0.90	24	0.70	0.47
5	0.97	26	0.70	0.49
6	0.92	25	0.73	0.48
7	0.91	24	0.78	0.48
8	0.91	25	0.78	0.49
9	0.84	23	0.67	0.50
10	0.98	28	0.63	0.51
11	0.96	27	0.64	0.51
12	0.96	26	0.66	0.49
13	0.96	27	0.66	0.52
14	0.85	25	0.69	0.52
15	0.75	22	0.69	0.53
16	0.64	19	0.66	0.54
17	1.19	35	0.62	0.53
18	0.73	22	0.63	0.55
19	1.17	33	0.63	0.50
20	0.93	28	0.69	0.55
21	0.88	27	0.76	0.55
22	0.68	20	0.75	0.54
23	1.11	33	0.68	0.54
24	1.10	33	0.68	0.54
25	0.30	9	0.69	0.55
26	1.07	32	0.70	0.53
27	0.92	25	0.65	0.49
28	0.76	23	0.66	0.54
29	0.76	23	0.66	0.55
30	0.97	30	0.62	0.56
31	0.61	18	0.68	0.54
Avg	0.89	25.31	0.68	0.52
Min	0.30	9.26	0.62	0.43
Max	1.19	34.97	0.78	0.56
Total	27.46	784.47		

Operating comments

Monthly Fluoride Report		System Information	
System Type - Fluoride Systems		Treatment plant: Riverside Station	
System Name:	Greater Augusta Utility District	Chemical Used: Sodium Fluoride	
PWSID#: 90080		Notes: See notes below for specific operating conditions.	
Reporting period:	December, 2019	Date	HETL mg/L
Signature: 	1/9/2020	12/18/2019 11:25 0.67	12 Williams Street 0.6

Fluoride				
Date	Mgals pumped	Gallons of makeup water	Daily Residual	Theoretical Calculation
units:	Mgals	gallons	mg/L	mg/L
1	0.56	19	0.65	0.61
2	0.80	27	0.63	0.61
3	0.59	20	0.62	0.61
4	0.56	18	0.70	0.58
5	0.59	20	0.69	0.62
6	0.71	19	0.66	0.48
7	0.66	22	0.69	0.60
8	0.57	18	0.70	0.57
9	0.75	24	0.71	0.57
10	0.52	17	0.71	0.58
11	0.62	19	0.71	0.55
12	0.54	17	0.71	0.57
13	0.61	19	0.70	0.56
14	0.46	14	0.68	0.55
15	0.48	15	0.67	0.56
16	0.75	23	0.68	0.55
17	0.55	16	0.66	0.53
18	0.66	21	0.64	0.57
19	0.49	13	0.63	0.48
20	0.59	19	0.63	0.58
21	0.53	16	0.65	0.55
22	0.50	15	0.65	0.54
23	0.53	16	0.63	0.55
24	0.44	12	0.62	0.49
25	0.66	20	0.64	0.55
26	0.68	22	0.65	0.58
27	0.49	15	0.67	0.55
28	0.48	15	0.67	0.56
29	0.63	19	0.67	0.54
30	0.57	18	0.68	0.57
31	0.73	24	0.68	0.59
Avg	0.59	18.45	0.67	0.56
Min	0.44	12.00	0.62	0.48
Max	0.80	27.00	0.71	0.62
Total	18.31	572.00		

Operating comments

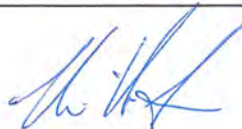
Greater Augusta Utility District, PWSID 90080

Operator: Brian Tarbuck, 2026

Togus Disinfection Station, Route 17 Augusta, Maine

Reporting month: December, 2019

Reporting date: 1/9/2020



Date	Flow (gallons)	Average Togus chlorine residual (mg/L)	Sodium hypochlorite usage (gallons)	Operating notes
12/1/2019	62,703	1.27	0.4	
12/2/2019	68,450	1.29	0.5	
12/3/2019	69,390	1.53	0.5	
12/4/2019	75,660	1.44	0.5	
12/5/2019	72,200	1.40	0.5	
12/6/2019	74,730	1.24	0.5	
12/7/2019	64,700	1.34	0.5	
12/8/2019	63,500	1.37	0.4	
12/9/2019	66,990	1.18	0.5	
12/10/2019	74,060	1.35	0.5	
12/11/2019	74,060	1.32	0.6	
12/12/2019	71,660	1.47	0.5	
12/13/2019	70,730	1.44	0.5	
12/14/2019	62,290	1.29	0.4	
12/15/2019	2,410	1.23	-	
12/16/2019	107,350	1.14	0.8	
12/17/2019	87,570	1.23	0.6	
12/18/2019	69,650	1.26	0.5	
12/19/2019	72,330	1.19	0.5	
12/20/2019	70,050	1.27	0.4	
12/21/2019	63,100	1.36	0.4	
12/22/2019	0	1.19	-	no consumption
12/23/2019	71,130	1.11	0.5	
12/24/2019	65,510	1.12	0.4	
12/25/2019	63,500	1.21	0.4	
12/26/2019	68,180	1.22	0.5	
12/27/2019	71,250	1.28	0.5	
12/28/2019	62,570	1.32	0.5	
12/29/2019	930	1.20	-	no consumption
12/30/2019	131,160	1.22	0.9	
12/31/2019	63,100	1.28	0.4	
Sum	2,040,913		14.2	
Average	65,836	1.3	0.5	
Max		1.5		