

Phone: (207) 622-3701
(207) 622-6184

AUGUSTA WATER & SANITARY DISTRICTS

Fax: (207) 622-4539

12 Williams Street
Augusta, Maine 04330
www.augustawater.org

DALE C. GLIDDEN
General Manager

Engineering Fax: (207) 621-0360

TRUSTEES:

DAVID P. SMITH, President
BEVERLY W. BEAUCAGE, Treasurer
PAUL F. McCLAY

COMMISSIONERS:

KENNETH R. KNIGHT, Chair
WILLIAM R. BRIDGEO, Treasurer
DIANE HASTINGS, Clerk

July 8, 2005

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

Dear Ms. Douin:

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, 2005. You should find the following documents:

1. Fluoridation Report;
2. Total Coliform Monitoring Report for Dawn Carpenter;
3. South Well, Brookside Well and Triangle well pumpage report;
4. Triangle Station Monthly Operating Report;

In early July, our fluoride vendor switched to a different manufacturer. This newer fluoride does not dissolve well, and has caused many operational problems as a result. Our operators have been struggling with both air binding problems and dissolution problems. We are searching for a different supplier but to date, that search has been unsuccessful because all of the vendors use the same suppliers.

We also had a sodium hypochlorite delivery on July 14th that gave us headaches. At first, we thought the tank had been overfilled because the ultrasonic level probe reported its maximum level of 1,100 gallons. Since this level is set in the PLC, any elevations above a certain point report as 1,100 gallons. After two days though, it should have changed and didn't. We looked into the tank after the weekend and it appeared that the hypo had "foamed" up. This was abnormal, but not to the point of real concern. The foam was cleared away and the sensor began to work properly, but then it got erratic again.

Further inspection showed that the hypochlorite load had turned from an amber color to something more "purple". We reacted to this development by contacting the vendor and had them remove the entire remaining portion of chemical on July 28th. The vendor reported that iron was the offending element. The vendor also reported that they didn't typical "filter" their product, but they would in the future.

We sent a sample of the product out to be sampled for a number of other inorganics and VOC's for verification purposes.

In the meantime, we have enacted a delivery procedure that requires the vendor to meet AWWA / ANSI requirements for drinking water-grade hypochlorite. We require a bill of lading from the manufacturer to our site. We require a sample that is collected from the truck at the time of delivery. The operator is directed to sample the product's density with a hydrometer, and to note any peculiar odors or colors associated with the sample. Only after testing the product will the operator allow the driver to fill the tank. Finally, a sample of the product is kept for further testing if necessary.

We believe that these procedures will reduce the risk of accepting another discolored load of sodium hypochlorite in the future.

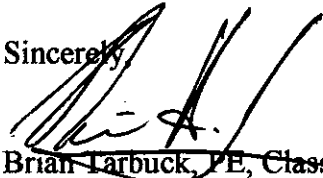
On another note, Scott Minor has retired as the General Manager of the Augusta Water District effective August 1, 2005. Our new General Manager is Dale Glidden. Dale has been the Superintendent of the Augusta Sanitary District, and has recently accepted the new responsibilities on the drinking water side. Please ensure that the DWP's database is updated accordingly.

Finally, our address for all correspondence has changed to:

Augusta Water District
12 Williams Street
Augusta, ME 04330

Please contact me at 622-8880 x117 if you have any questions about this report.

Sincerely,



~~Brian Tarbuck, PE, Class-IV System ME #2026~~
Assistant General Manager

cc: Dale Glidden

Monthly Fluoride Report
System Type - Fluoride Systems

System Information

System Name: **Augusta Water District**

Treatment plant/pump station: **Triangle Station**
 Fluoride Chemical Used: **Sodium fluoride**

PWSID#: **90080**

Reporting period: **July, 2005**

Notes:

Signature:  Date: **8/10/2005**

Date	AWD	Location	HETL
7/12/2005 14:20	1.07	Triangle Wellhouse	1.15
7/12/2005 14:35	1.00	Western Station	1.09
7/12/2005 13:50	1.16	Northwest Station	1.24
7/12/2005 13:30	1.03	Hospital St. Station	1.13

Fluoride

Date	Total production	Gallons of makeup water	Daily Average Residual	Theoretical Calculation
units:	Mgals	gallons	mg / L	mg / L
1	1.67	117	1.15	1.27
2	2.05	114	1.10	1.00
3	1.43	99	1.14	1.24
4	1.87	100	1.13	0.97
5	2.19	111	1.11	0.91
6	1.70	124	1.18	1.31
7	2.22	72	1.13	0.59
8	1.70	125	1.15	1.33
9	1.73	120	1.13	1.25
10	1.37	91	1.13	1.19
11	2.28	93	1.13	0.74
12	2.01	119	1.10	1.07
13	2.45	113	1.10	0.83
14	1.92	116	1.11	1.09
15	1.93	122	1.13	1.14
16	1.69	115	1.14	1.22
17	1.62	98	1.13	1.09
18	2.15	105	1.10	0.88
19	2.17	105	1.07	0.87
20	1.94	129	1.07	1.20
21	2.04	116	1.03	1.02
22	2.27	132	1.00	1.05
23	1.66	114	0.86	1.23
24	1.81	27	0.11	0.27
25	1.98	31	0.37	0.28
26	2.42	112	1.13	0.83
27	2.18	147	1.13	1.21
28	1.74	120	1.16	1.25
29	2.40	111	1.03	0.84
30	1.82	138	1.15	1.36
31	1.75	143	1.14	1.47
Avg	1.94	109	1.06	1.03
Min	1.37	27	0.11	0.27
Max	2.45	147	1.18	1.47
Total	60.13	3,377		

Systems that don't use the state lab need to report their distribution system certified lab results here.

Date	Location in the distribution system	Result mg/L

Notes:
 Recently, our chemical vendor switched from a Japanese-manufactured sodium fluoride product to a Chinese product. The Chinese product has a tendency to gasify and cause air binding on the discharge side of the pump. This has been an issue for us at approximately 16 hour intervals. We have systems in place that help minimize this. We are waiting for a different Chinese fluoride that is supposed to minimize these effects, but until then, it's very difficult to deliver consistent fluoride doses.

Bacteriological Report Form
 Utility: Augusta Water District, PWSID: 90080
 Laboratory: Augusta Water District, Lab # 1015075

Number of samples required 15
 Number of samples taken for compliance 30
 Number of quality control samples 1
 Number of positive samples 0

I hereby certify that this report is true and correct and that the bacteriological analyses reported herein were performed in accordance with the Standard Methods for Water Analysis.

June Mooney
 June Mooney, Laboratory Director

Sam. #	Location	Sam. Type	Collected by	Collection date & time	Free Cl ₂	Total Cl ₂	Fluoride (mg/l)	Set up by:	Date & time	Coliform Present/Absent	Method	Lauryl Tryplose 24 hr	48 hr	bril. green	EC44.5c	HPC 48 hrs	
1	TREATMENT PLANT	DIS	MOONEY	7-6-05/9:45	0.22	0.23	0.98	MOONEY	7-6-05/5:00	A	COLLERT						
2	WESTERN STA.	DIS	MOONEY	7-6-05/11:40	0.64	0.66	0.98	MOONEY	7-6-05/5:00	A	COLLERT						
3	WILLOW ST. STA.	DIS	MOONEY	7-6-05/11:45	0.75	0.78	1.04	MOONEY	7-6-05/5:00	A	COLLERT						
4	AWD OFFICE	DIS	MOONEY	7-6-05/11:15	0.96	0.96	1.06	MOONEY	7-6-05/5:00	A	COLLERT						
5	HOSPITAL ST. STA.	DIS	MOONEY	7-6-05/11:45	0.79	0.80	1.06	MOONEY	7-6-05/5:00	A	COLLERT						
6	NORTHWEST STA.	DIS	MOONEY	7-6-05/2:15	1.08	1.06	1.13	MOONEY	7-6-05/5:00	A	COLLERT						
7	WELHOUSE	DIS	MOONEY	7-6-05/2:50	1.11	1.11	1.18	MOONEY	7-6-05/5:00	A	COLLERT						
8	GREYBIRCH	DIS	MOONEY	7-6-05/3:20	0.67	0.64	0.95	MOONEY	7-6-05/5:00	A	COLLERT						
9	TREATMENT PLANT	DIS	MOONEY	7-12-05/11:00	0.04	0.05	0.97	MOONEY	7-12-05/12:20	A	COLLERT					1.2ML	
10	HOSPITAL ST. STA.	DIS	MOONEY	7-12-05/1:30	0.90	0.93	1.03	MOONEY	7-12-05/4:45	A	COLLERT						
11	NORTHWEST STA.	DIS	MOONEY	7-12-05/1:50	1.32	1.31	1.16	MOONEY	7-12-05/4:45	A	COLLERT						
12	WELHOUSE	DIS	MOONEY	7-12-05/2:20	1.43	1.41	1.07	MOONEY	7-12-05/4:45	A	COLLERT						
13	WESTERN STA.	DIS	MOONEY	7-12-05/2:35	0.62	0.65	1.00	MOONEY	7-12-05/4:45	A	COLLERT						
14	AWD OFFICE	DIS	MOONEY	7-12-05/3:40	1.18	1.15	1.17	MOONEY	7-12-05/4:45	A	COLLERT						
15	MULLIGANS	DIS	MOONEY	7-13-05/10:05	0.31	0.30	1.04	MOONEY	7-13-05/2:00	A	COLLERT						
16	TREATMENT PLANT	DIS	MOONEY	7-18-05/11:20	1.50	1.50	1.07	MOONEY	7-18-05/5:00	A	COLLERT						
17	WELHOUSE	DIS	MOONEY	7-18-05/1:00	1.41	1.38	1.20	MOONEY	7-18-05/5:00	A	COLLERT						
18	WESTERN STA.	DIS	MOONEY	7-18-05/1:10	0.88	0.88	1.01	MOONEY	7-18-05/5:00	A	COLLERT						
19	BEST INN	DIS	MOONEY	7-18-05/1:30	0.63	0.66	1.00	MOONEY	7-18-05/5:00	A	COLLERT						
20	NORTHWEST STA.	DIS	MOONEY	7-18-05/1:50	1.29	1.29	1.19	MOONEY	7-18-05/5:00	A	COLLERT						
21	AWD OFFICE	DIS	MOONEY	7-18-05/2:20	1.22	1.22	1.00	MOONEY	7-18-05/5:00	A	COLLERT						
22	HOSPITAL ST. STA.	DIS	MOONEY	7-18-05/2:45	0.89	0.91	1.01	MOONEY	7-18-05/5:00	A	COLLERT						
23	WELHOUSE	DIS	MOONEY	7-27-05/11:30	1.30	1.32	1.03	MOONEY	7-28-05/8:45	A	COLLERT						
24	NORTHWEST STA.	DIS	MOONEY	7-27-05/11:50	1.26	1.25	1.02	MOONEY	7-28-05/8:45	A	COLLERT						
25	WESTERN STA.	DIS	MOONEY	7-27-05/2:10	0.57	0.58	0.88	MOONEY	7-28-05/8:45	A	COLLERT						
26	AWD OFFICE	DIS	MOONEY	7-27-05/12:45	1.25	1.25	1.03	MOONEY	7-28-05/8:45	A	COLLERT						
27	HOSPITAL ST. STA.	DIS	MOONEY	7-27-05/1:15	0.76	0.77	0.85	MOONEY	7-28-05/8:45	A	COLLERT						
28	MULLIGANS	DIS	MOONEY	7-27-05/1:40	0.99	1.01	0.94	MOONEY	7-28-05/8:45	A	COLLERT						
29	TREATMENT PLANT	DIS	MOONEY	7-27-05/2:30	0.15	0.17	0.90	MOONEY	7-28-05/8:45	A	COLLERT						
30	204 SOUTH BELFAST AVE	DIS	MOONEY	7-6-05/12:00	0.89	0.70	0.98	MOONEY	7-6-05/5:00	A	COLLERT						
*	LAB DI WATER	SPT	MOONEY	7-21-05/10:15	0.37	0.40	1.00	MOONEY	7-21-05/2:45	A	COLLERT						
					0.00	0.00		MOONEY							COND=0.84	UMHOS	0.2ML

Monthly Well Production Report
System Type - All GW systems

System Name: **Augusta Water District**

PWSID#: **90080**

Designated operator name and ME License #: **Brian Tarbuck**
2026

e-mail address: **btarbuck@augustawater.org**

Reporting period (month and year): **July - 05**

Signature: *[Signature]* Date: **8/9/2005**

System Information

Treatment plant/pump station: **All wells**

Select one

Community System →

Non-transient Non-community →

Transient Non-Community →

List any new or changed system information (facilities, treatments, sources, operators, address, tele, etc.):

List any operation problems or comments:

This sheet reports production from all three wells at Augusta Water District. This is a supplemental report to the MOR.

Daily water production (MG)

Date	Triangle Well	South Well	Brookside Well	Sum
1	0.38	1.10	0.19	1.67
2	0.55	1.07	0.44	2.05
3	0.15	1.11	0.17	1.43
4	0.40	1.09	0.38	1.87
5	0.62	0.79	0.78	2.19
6	0.51	0.21	0.98	1.70
7	0.82	0.49	0.91	2.22
8	0.38	0.34	0.98	1.70
9	0.59	0.17	0.97	1.73
10	0.33	0.00	1.04	1.37
11	0.84	0.55	0.88	2.28
12	0.82	0.26	0.92	2.01
13	1.01	0.59	0.85	2.45
14	0.58	0.50	0.84	1.92
15	0.54	0.47	0.92	1.93
16	0.38	0.33	0.98	1.69
17	0.34	0.30	0.98	1.62
18	0.68	0.59	0.89	2.15
19	0.92	0.34	0.91	2.17
20	1.28	0.34	0.32	1.94
21	1.27	0.40	0.37	2.04
22	1.25	0.31	0.71	2.27
23	1.30	0.16	0.20	1.66
24	1.31	0.28	0.22	1.81
25	1.26	0.36	0.36	1.98
26	1.22	0.32	0.88	2.42
27	1.26	0.00	0.91	2.18
28	1.30	0.11	0.33	1.74
29	1.23	0.29	0.88	2.40
30	1.28	0.18	0.35	1.82
31	1.28	0.23	0.23	1.75
Sum	26.07	13.27	20.79	60.13

Monthly Operating Report
System Type - All GW systems

System Name: **Augusta Water District**

PWSID#: **90080**

Designated operator name and ME License #: **Brian Tarbuck**
2026

e-mail address: **btarbuck@augustawater.org**

Reporting period (month and year): **July - 05**

Signature:  Date: **8/9/2005**

System Information

Treatment plant/pump station: **Triangle Station**

Select one
 Community System →
 Non-transient Non-community →
 Transient Non-Community →

List any new or changed system information (facilities, treatments, sources, operators, address, tele, ect.):

List any operation problems or comments:

Had problems with level sensor on hypo tank; foam on top of hypo; turned out to be iron; was replaced 7/27 by Jones Chemical; see report.

Daily water production

Date	Mgals pumped	Peak hourly flow	pH	Dis. log inactivation
1	1.67	n/a	7.79	n/a
2	2.05	n/a	7.80	n/a
3	1.43	n/a	7.78	n/a
4	1.87	n/a	7.79	n/a
5	2.19	n/a	7.80	n/a
6	1.70	n/a	7.78	n/a
7	2.22	n/a	7.78	n/a
8	1.70	n/a	7.78	n/a
9	1.73	n/a	7.78	n/a
10	1.37	n/a	7.78	n/a
11	2.28	n/a	7.79	n/a
12	2.01	n/a	7.78	n/a
13	2.45	n/a	7.79	n/a
14	1.92	n/a	7.79	n/a
15	1.93	n/a	7.79	n/a
16	1.69	n/a	7.79	n/a
17	1.62	n/a	7.80	n/a
18	2.15	n/a	7.80	n/a
19	2.17	n/a	7.79	n/a
20	1.94	n/a	7.78	n/a
21	2.04	n/a	7.77	n/a
22	2.27	n/a	7.77	n/a
23	1.66	n/a	7.76	n/a
24	1.81	n/a	7.76	n/a
25	1.96	n/a	7.77	n/a
26	2.42	n/a	7.77	n/a
27	2.18	n/a	7.76	n/a
28	1.74	n/a	7.74	n/a
29	2.40	n/a	7.78	n/a
30	1.82	n/a	7.78	n/a
31	1.75	n/a	7.78	n/a
Summary	60.13		7.78	

(total) (avg.) (avg.) (min.)

From table below:

List units: (i.e. lbs, gal)

Chemical usage

Chemical usage						Disinfectant Residual
1	2	3	4	5	6	mg/L
gal	gal	lbs				
-3	1	0				1.15
2	14	0				1.19
3	21	0				1.20
3	15	50				1.21
3	18	50				1.21
3	24	0				1.26
2	15	100				1.30
3	24	0				1.35
3	20	0				1.48
2	19	0				1.42
3	19	100				1.55
3	38	0				1.61
2	26	100				1.61
3	20	0				1.51
3	20	100				1.53
2	20	0				1.56
2	20	0				1.53
5	20	100				1.55
3	20	0				1.59
2	20	100				1.56
1	20	0				1.59
4	20	50				1.54
2	20	0				1.57
2	20	0				1.57
3	20	450				1.55
3	20	0				1.42
6	21	0				1.46
-4	25	0				1.48
-2	34	100				1.40
10	28	0				1.65
2	19	0				1.44
77.36	643	1,300				1.15

(total) (total) (total) (total) (total) (total) (min.)

Chemicals Used

(report fluoride info on separate fluoride form)

Number	Chemical Name	Purpose	Chemical Strength
1	Calciquest liquid	calcium sequestration / Pb / Cu control	75% polyphosphate
2	Sodium hypochlorite	primary and secondary disinfection	12.50%
3	sodium fluoride	fluoridation	
4			
5			
6			
Disinfectant			

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

Number of routine samples taken:	30	Number of repeat samples taken:	0
Number of positive samples:	0	Average chlorine residual at sites:	0.89