

MUNICIPAL DRINKING WATER SUPPLIES

ANNUAL REPORT

NOTE : ANNUAL REPORT MUST BE SUBMITTED ON OR BEFORE APRIL 1.

YEAR 2020 _____

MUNICIPALITY OF Annapolis

WATER UTILITY NAME: Annapolis County Water

FACILITY NAME : Margaretsville

APPROVAL TO OPERATE NO. 2004-038542-02

WATER WITHDRAWAL APPROVAL NO: 2014-090989

I certify that information provided in this report is a complete and accurate representation of Water System operation.

Offences under the Environment Act:

158 A person who

- (a) knowingly provides false or misleading information pursuant to a requirement under this Act to provide information;
- (b) provides false or misleading information pursuant to a requirement under this Act to provide information;
- (c) does not provide information as required pursuant to this Act;
- (d) hinders or obstructs an inspector or administrator who is exercising powers or carrying out duties, or attempting to do so, pursuant to this Act;
- (e) knowingly contravenes a term or condition of an approval, an environmental assessment approval, a temporary approval, a certificate of variance or a certificate of qualification;

Name of the person in overall direct responsible charge

[Print Name] JAMES JENNER.....

Signature

Manager responsible for water system [Print Name]

Signature

PART 1 - STANDARD SUBMISSIONS.

Has the Utility submitted following updates for the next year:

Required Submission	Yes	No	N/A Last year submission remains unchanged
Contingency Plan			X
Notification Procedure			X
Monitoring Program (including sampling points location)			X
QA/QC			X
Source Water Protection Plan			X
Source Water Implementation Schedule			X
Lab Information			X
Operations Manual			X
Staff List and certification			X

NOVA SCOTIA ENVIRONMENT

PART 2 - WATER TREATMENT PLANT MONITORING

A. WATER TREATMENT

Table 1- Raw water flow

Month	Raw water flow (m ³)	
	Source..Gudi. Well No, Lake or River Name	
	Total Monthly Volume (m ³)	Max Daily Volume (m ³ /d)
January	3594	126
February	3736	185
March	2768	176
April	1684	65
May	1950	85
Jun	2146	92
July	2719	122
August	3195	146
September	1824	70
October	1933	76
November	1842	70
December	1983	76
Total for the year.....	29374 m3	
Maximum month	August	
Average	2447.83	
Water withdraw Approval No.. 2014-090989	Withdraw limit:m3/day.....	
Approval to Operate No:.... 2004-038542-02	Rated design capacity:...cu3/day...	

Table 2 - Filtered water turbidity

Month	Filter 1			Filter 2			Combined Turbidity	
	Turbidity		Filter to waste	Turbidity		Filter to waste		
	How many times exceed Approval	max NTU	max (upon return to production)	How many times exceed Approval	max NTU	max	How many times exceed Approval	max
January	0	.08		0	.09		0	.09
February	0	.07		0	.12		0	.12
March	0	.09		0	.09		0	.09
April	0	.11		0	.12		0	.12
May	0	.15		0	.06		0	.15
Jun	0	.08		0	.08		0	.08
July	0	.12		0	.08		0	.12
August	0	.16		0	.10		0	.16
September	0	.07		0	.13		0	.13
October	0	.09		0	.17		0	.17
November	0	.12		0	.09		0	.12
December	0	.46		0	.08		0	.46
If Approval Limits for Filtration were exceeded provide date when Department was notified:								
Action taken:								

Table 2 - Well water turbidity

Month	Well 1		Well 2		Comments
	Turbidity		Turbidity		
	How many times exceed Approval	maximum NTU	How many times exceed Approval	maximum NTU	
January	0		0		
February	0		0		
March	0		0		
April	0		0		
May	0		0		
Jun	0		0		
July	0		0		
August	0		0		
September	0		0		
October	0		0		
November	0		0		
December	0		0		
<p>If exceeded provide dates of occurrence and date when Department was notified.</p>					
<p>Action taken:</p>					

Table 3 - Disinfection (leaving treatment plant or well)

Month	Disinfectant residual (mg/l)			CT value
	Minimum this month	How many times below Approval limit	Maximum this month	How many times CT _{achieved} was less than CT _{required}
January	1.58	0	2.12	0
February	1.63	0	1.97	0
March	1.67	0	2.08	0
April	1.31	0	2.08	0
May	1.39	0	2.18	0
Jun	1.41	0	1.92	0
July	1.38	0	2.38	0
August	1.24	0	2.63	0
September	1.77	0	2.37	0
October	1.42	0	1.91	0
November	1.63	0	2.22	0
December	1.55	0	2.21	0
If Approval Limits were exceeded provide date of occurrence and date when Department was notified:				
If CT requirements were not met provide date of occurrence and date when Department was notified:				
Action Taken:				
NOTE: CT values must be calculated daily, or minimum operational conditions must be monitored daily and records kept by Approval Holder				
MINIMUM OPERATIONAL PARAMETERS TO PROVIDE REQUIRED CT (CT calculations for "worst case scenario" must be provided to Department) See attached				
Peak Daily Flow			185	
Temperature at CT control Point			5c	
Minimum residual at CT control Point			1.24	
pH at CT control Point			7.70	
Water level in the tank during peak hourly flow			75%	
Total chlorine use this year:...kg			Target organism: Giardia..... Or Viruses.....	

Table 4 - Bacteriological quality (leaving treatment plant or GUDI well)

Month	Total number of samples taken	<i>E.coli</i>	Total Coliform	Giardia		Cryptosporidium	
		No. of Present this month	No. of Present this month	if tested N/A		if tested N/A	
				No. of Present this month	Total	No. of Present this month	Total
January	4	0	0	0	0	0	0
February	4	0	0	0	0	0	0
March	5	0	0	0	0	0	0
April	4	0	0	0	0	0	0
May	4	0	0	0	0	0	0
Jun	5	0	0	0	0	0	0
July	4	0	0	0	0	0	0
August	5	0	0	0	0	0	0
September	3	0	0	0	0	0	0
October	3	0	0	0	0	0	0
November	3	0	0	0	0	0	0
December	4	0	0	0	0	0	0
If <i>E.coli</i> Present provide date of occurrence and date when Department was notified:							
If Total Coliforms Present provide date of occurrence and date when Department was notified							
Action taken:							
Certified Lab: Valley Regional Hospital							

Table 5 - Fluoride (if fluoridating)

Month	Min this month (mg/l)	Max this month (mg/l)
January	N/A	
February		
March		
April		
May		
Jun		
July		
August		
September		
October		
November		
December		
If exceeded Approval limits provide date of occurrence and date when Department was notified:		
Action taken:		

Table 6 - Aluminum (for facilities using aluminum-based coagulants)

	At Treatment Facility		Distribution System*	
Month	Min this month (mg/l)	Max this month (mg/l)	Min this month (mg/l)	Max this month (mg/l)
January				
February				
March				
April				
May				
Jun				
July				
August				
September				
October				
November				
December				
If Aluminum exceeded Approval limits provide date of occurrence and date when Department was notified				
Action taken:				

Table 7- pH

Month	Raw water inlet		CT Control Point	
	Minimum this month	Maximum this month	Minimum this month	Maximum this month
January	6.72	7.08	6.72	7.08
February	6.72	7.10	6.72	7.10
March	6.87	7.07	6.87	7.07
April	6.70	7.17	6.70	7.17
May	6.67	6.89	6.67	6.89
Jun	6.50	6.91	6.50	6.91
July	6.77	6.88	6.77	6.88
August	6.81	7.32	6.81	7.32
September	7.30	7.76	7.30	7.76
October	7.45	7.61	7.45	7.61
November	7.54	7.70	7.54	7.70
December	7.25	7.52	7.25	7.52
Comments:				

Table 8 - Guidelines for Monitoring Public Drinking Water Supplies (Section 33 of Regulations)

Parameter	Health based guideline (mg/l)	AO [or OG] (mg/l)	Raw mg/l (maximum this year)	Treated mg/l (maximum this year)	Date	Location
Alkalinity	-	-	66	66	July 29	
Aluminum	0.1/0.2		<.005	.006		
Ammonia	-	-	<.003	<.003		
Antimony	0.006	-	<.002	<.002		
Arsenic	0.010	-	<.002	<.002		
Barium	1	-	<.005	<.005		
Boron	5	-	.008	.009		
Cadmium	0.005	-	<.000017	<.000017		
Calcium	-	-	15.2	15.3		
Chloride	-	≤250	12	18		
Chromium	0.05	-	<.001	<.001		
Colour	-	≤15	10	8		
Conductivity	-	-	222	225		
Copper	-	≤1.0	.001	.002		
Fluoride	1.5	-	<.12	<.12		
Hardness	-	-	60.6	60.9		
Iron	-	≤0.3	<.050	<.050		
Lead	0.010	-	<.0005	<.0005		
Magnesium	-	-	5.5	5.5		
Manganese	-	≤0.05	.003	<.002		
Nitrate - nitrogen	10	-	3.05	1.61		
pH	-	6.5-8.5	7.42	7.55		
Potassium	-	-	.3	.2		
Selenium	0.01	-	<.001	<.001		

Parameter	Health based guideline (mg/l)	AO [or OG] (mg/l)	Raw mg/l (maximum this year)	Treated mg/l (maximum this year)	Date	Location
Sodium	-	≤200	16.1	12.3		
Sulphate	-	≤500	4	4		
Total Dissolved Solids	-	≤500	108	102		
Total Organic Carbon	-	-	1.4	1.4		
Turbidity	See Approval	-	.7	<.5		
Uranium	0.02	-	.0001	.0003		
Zinc	-	≤5.0	<.005	<.005		
OTHER PARAMETERS SAMPLED						
Has any of the parameter exceeded Guidelines Yes..... No...X.						
If Yes provide date of occurrence and date when Department was notified:						
Action taken:						
Certified Lab:AGAT						

Table 9 - Raw Water turbidity

Month	Minimum NTU	Maximum NTU
January	.07	.21
February	.07	.26
March	.08	.13
April	.05	.21
May	.06	.18
Jun	.05	.24
July	.07	.22
August	.05	.27
September	.06	.20
October	.05	.27
November	.11	.580
December	.09	.800

NOVA SCOTIA ENVIRONMENT

B. WASTE TREATMENT

Table 10 - Waste water discharge

Month	Suspended Solids Limit:.....		Aluminum Limit:.....		Chlorine Limit:.....		pH Limit:		Fish toxicity	
	average mg/l	Max mg/l	average mg/l	Max mg/l	average mg/l	Max mg/l	average mg/l	Max mg/l		
January										
February										
March										
April										
May										
Jun										
July										
August										
September										
October										
November										
December										
Has any of the parameter exceeded Limits Yes..... No.....										
If Yes provide date of occurrence and date when Department was notified:										

PART 3 - WATER DISTRIBUTION SYSTEM MONITORING

Table 11 - Distribution System Bacteriology and Disinfection Residual

Site : A		Location: Hiway 362									
Month	<i>E.coli</i>				Total Coliforms				Free chlorine residual		
	Present	Absent	Total number of samples	% Absent	Present	Absent	Total number of samples	% Absent	Min mg/l	Max mg/l	No. below Approval Limits
January	0	4	4	100	0	4	4	100	1.57	1.95	0
February	0	4	4	100	0	4	4	100	1.25	1.91	0
March	0	5	5	100	0	5	5	100	1.03	1.75	0
April	0	3	3	100	0	3	3	100	.75	1.48	0
May	0	4	4	100	0	4	4	100	.56	1.03	0
Jun	0	5	5	100	0	5	5	100	.39	1.17	0
July	0	4	4	100	0	4	4	100	.37	1.14	00
August	0	5	5	100	0	5	5	100	.23	.88	0
September	0	3	3	100	0	3	3	100	.44	.81	0
October	0	3	3	100	0	3	3	100	.27	.77	0
November	0	3	3	100	0	3	3	100	.30	.92	0
December	0	4	4	100	0	4	4	100	.50	1.35	0
If Approval limits exceeded, provide date of occurrence and date when Department was notified:											
Action taken:											

Table 11 - Distribution System Bacteriology and Disinfection Residual (continued)

Site : B		Location: Seamen St									
Month	<i>E.coli</i>				Total Coliforms				Free chlorine residual		
	Present	Absent	Total number of samples	% Absent	Present	Absent	Total number of samples	% Absent	Min mg/l	Max mg/l	No. below 0.2 mg/l
January	0	4	4	100	0	4	4	100	1.05	1.59	0
February	0	4	4	100	0	4	4	100	1.22	1.45	0
March	0	5	5	100	0	5	5	100	1.15	1.55	0
April	0	3	3	100	0	3	3	100	.88	1.61	0
May	0	4	4	100	0	4	4	100	.80	1.34	0
Jun	0	5	5	100	0	5	5	100	.57	1.37	0
July	0	4	4	100	0	4	4	100	.31	1.25	0
August	0	5	5	100	0	5	5	100	.26	1.31	0
September	0	3	3	100	0	3	3	100	.73	1.28	0
October	0	3	3	100	0	3	3	100	.68	1.30	0
November	0	3	3	100	0	3	3	100	.95	1.30	0
December	0	4	4	100	0	4	4	100	1.31	1.55	0
Was E.Coli or Total Coliform present in any sample this year Yes..... No.....											
If Yes provide date of occurrence and date when Department was notified:											
Action taken:											

Table 12a - Distribution System THM's

Month	Site A Location: Hiway 362	Site B Location Treated water	Site C Location: Seaman St
	THM total ug/l	THM total ug/l	THM total ug/l
January			
February	28	13	17
March 1st Qt			
April			
May	54	20	34
Jun 2nd Qt			
July	89	69	95
August			
September 3rd Qt			
October			
November	109	40	79
December 4th Qt			
Annual Average	70	35.5	56.2
Limits	100 ug/l THM's - Locational running annual average based on a minimum of four quarterly samples.		
Action taken:			

Table 12b - Distribution System HAA's

Month	Site A Location: Hiway 362	Site B Location: Treated Water	Site C Location: Seaman st
	HAA (5) ug/l	HAA (5) ug/l	HAA (5) ug/l
January			
February	30.4	18.1	21.7
March 1st Qt			
April			
May	39.5	24	27.2
Jun 2nd Qt			
July	98.4	73.2	111
August			
September 3rd Qt			
October			
November	45.9	30.7	45
December 4th Qt			
Annual Average	53.5	36.5	51.2
Limits	80 ug/l HAA's - Locational running annual average based on a minimum of four quarterly samples.		
Action taken:			

Table 13 - Distribution System Turbidity

Month	Site A Location: Hiway 362		Site B Location: Seaman St		Site C Location: Gorden Rd	
	min NTU	max NTU	min NTU	max NTU	min NTU	max NTU
January	.03	.05	.03	.06		
February	.03	.05	.03	.06		
March	.04	.027	.03	.05	.05	.24
April	.04	.09	.03	.06	.03	.08
May	.04	.08	.03	.05	.04	.06
Jun	.04	.06	.02	.07	.04	.06
July	.05	.12	.05	.09	.06	.53
August	.07	.25	.09	.30	.0	.46
September	.05	.10	.05	.20	.05	.10
October	.03	.09	.04	.07	.03	.07
November	.03	.06	.05	.08	.05	.05
December	.04	.05	.04	.07		
If Approval limits were exceeded provide date of occurrence and date when Department was notified:						
Action taken: Gorden Rd was shut down for the missing readings						

Table 14 - Distribution System Lead

Month* (specify date sampled)	Site A Location: 100 Seaman st		Site B Location: 101 Bayview		Site C Location: 179 Seaman St	
	min ug/l	max ug/l	min ug/l	max ug/l	min ug/l	max ug/l
May						
Jun						
July						
August	.6	5.7	<.5	10	2.2	<.5
September						
October						

If Approval limits were exceeded provide date of occurrence and date when Department was notified:

These are flushed timed samples.

* To be sampled during warmest months

Table 15 - Distribution System Corrosion Control Program

Month	Site A Location: 100 Seaman St		Site B Location: Fire hall		Site C Location: 180 Seaman St	
	Parameter 1LEAD..	Parameter 2Langelier index...	Parameter 1LEAD.....	Parameter 2 ... Langelier index..	Parameter 1LEAD.....	Parameter 2 ... Langelier index...
January						
February						
March						
April						
May						
Jun						
July						
August	95 ug	-.36	84 ug	-.45	100 ug	-.28
September						
October						
November						
December						
Comments:						

Table 16 - Storage tank chlorine residual

Month	Storage Tank Location: Ben Phinney Rd			Storage Tank Location.....			
	Min mg/l	Max mg/l	Number of times residual was less than 0.2 mg/l	Min mg/l	Max mg/l	Number of times residual was less than 0.2 mg/l	
January	1.58	2.12	0	na			
February	1.63	1.97	0				
March	1.67	2.08	0				
April	1.31	2.08	0				
May	1.39	2.18	0				
Jun	1.41	1.92	0				
July	.138	2.38	0				
August	1.24	2.63	0				
September	1.77	2.37	0				
October	1.42	1.91	0				
November	1.63	2.22	0				
December	1.55	2.21	0				
Action taken:							
Certified Lab:							

SOURCE WATER PROTECTION PLAN ANNUAL UPDATE CHECKLIST

Yearly review of the source water protection (SWP) plan is required. The review should consider questions including, but not limited, those listed below. Every five years, or whenever significant changes to the municipal water system or risks to its source occur, the municipal unit should consider revising the plan. Otherwise, updates may be added to the original source water protection plans in an appropriately identified appendix.

QUESTIONS TO CONSIDER IN ANNUAL UPDATE
How many source water committee meetings have been held in the past year? Have there been any changes to committee membership? None
Have there been any changes made to the committee terms of reference? No
Have changes to the system infrastructure been made (e.g. wells constructed or decommissioned)NO
Have any new risks to the watershed or aquifer area been identified? For example: <ul style="list-style-type: none"> · have new land uses which could impact the source water commenced (or existing uses changed or ceased) within the watershed or aquifer area? · have recreational uses of concern continued, declined or increased with the past year within the watershed or aquifer area? NONE
If new risks have been identified, what risk reduction strategies will be employed? N/A
Have any accidents/emergencies not considered in the contingency plan occurred within the watershed or aquifer area within the past year? NO
Has source water monitoring (differs from regulatory compliance monitoring) been undertaken? Please describe the results. NONE
Has your contingency plan been reviewed and contact information updated? YES
Have any accidents/emergencies not considered in the contingency plan occurred within the watershed or aquifer area within the past year? NO
Provide an updated schedule for the implementation of the SWP plan, including items completed within the last year, items ongoing, or items yet to be completed. Based on consideration of all the above questions, identify if any items need to be added to the implementation plan.

DESCRIPTION OF ANY EMERGENCY AND UPSET CONDITIONS AND CORRECTIVE ACTION

March 14 Called by homeowner 1644 Ben Phinney Rd said he went to check on his place and front lawn was soaked when he went inside basement was full of water and wanted water disconnected. Disconnected water to his place pipes broke before the meter sadly but he is aware there is charges for me coming to disconnect. Another leak down yay.

May 10 - Power has been restored at Margarettsville. checked Scada looks like chlorine pump one is not working and the analyzers need water to be turned back on I'm going over to check it out and get everything back online.

John

July 2 From Steve M Thinking about putting Margretnville under water restriction.

July 3 Following our conversation. Browns will be onsite next week to investigate the leak beside the reservoir. We suspect it is leaking before the drain valve from the tank. We will not be able to determine this until we can dig down beside it. Once we have a better idea I will let you know. This will help the low water issues we have substantially, this crock drains way down in the forest and very hard to find. I will put this on future plant check to check underdrains monthly.

July 7, 2020 FYI Browns excavation will be on site to repair the leaks at the reservoir. I will keep you posted as things unfold. Also I will get them to commence with the curb stop repairs needed There could possibly be some small leaks amongst these also.

July 10 An update on the work at Margarettsville this week. We were able to locate and fix the leak coming from the sand filter drain and the drain pipe from the reservoir. Yesterday's water going into the storage tank was 80m³ previously it was at 140m³ a day. With Brown's help repairing the long list of curb stop repairs we were able to tighten the system even more. Yesterday's total on the consumers side was 79m³. Looks like we now have the leaks all fixed.

July 29 Update on what is happening with the water supply in Margarettsville. water in upper pond fell below the invert of the pipe going to the new crock in turn reduced our supply to the sand filters. Mark and I put a pump with a genset in the pond and started to pump water into the crock to supply the sand filters. If we do not see a change in supply within the next few weeks we will be out of water. We are currently putting out 80-90 M³ into the system per day. This is normal for summer months. As long as water quality is maintained for consumption we should be ok. Water is a bit more turbid than what is normally pumped into sand filters but is within our guidelines. Steve and Greg we may want to discuss a 3rd option for supplying water if conditions change.

July 30

Pond has dropped 2" since we started pumping the upper pond into the main crock. Sand filter levels seem to be holding at ½ full. Yesterday consumption went up 20m³ to 110m³. Amy will be in this weekend to tend to the pump to keep water flowing. We will also be meeting this afternoon to go over what we are doing in my absence. If we do not get some ground water back next week we will likely have to shut the system down as we will be out of water.

On Aug 1

when Amy went to Margarettsville the water level was 4 inches below the bottom of the inlet pipe for the sand filters. Water was barely trickling into the pipe leading to the sand filters. The sand filters levels was at 28.3 and 23.5. I fueled up the generator and started the pump providing water to the sand filters.

On Aug 2

when Amy arrived to Margaretsville the water level was 4 & 3/4 inches below the inlet pipe. There was no water going into the pipe for the sand filters. I fueled up the generator and started the pump to provide water to the sand filters. There was also a call for low chlorine at the plant. When I went to the plant chlorine was coming out threw the threads on the 2 in valve above the chlorine injection point. I tightened up the valve and reprimed the line. Chlorine went up until the plant shut down at which point it started to go down again. I increased the pumps to provide more chlorine.

On Aug 3

when Amy arrived to Margaretsville with chlorine still not increasing properly I changed the injection coil and Andrew increased the pump rate. To which chlorine started to increase and Andrew lower the pump rate accordingly. Water levels in the pond was 5 and 1/2 inches below the bottom of the inlet pipe and water is trickling into the pipe for the sand filters. Sand filter levels was at 28.4 & 23.5. Fueled up the generator and start pump to provide water to sand filters.

On Aug 4

the water level is now 6 and 1/4 inches from the top of the water to the bottom of the inlet pipe. Water was bearily tickling into the pipe for the sand filters. Fueled up the generator and started the pump to provide water. Sand filter levels was 27.8 and 22.9.

Aug 7

The water level is at 7 and 3/4 in below the bottom of the inlet pipe. Marc and Matt was over on Aug the 5 to move the pump out into the pond further. We are still starting the generator everyday providing water to the plant

Aug 7 Greg has a Stainless Steel tanker hauling water starting Monday morning. We will be filling the tanker up in Bridgetown.

Let me know if you need anything else.

Aug 9

Yesterday Aug 8 water levels was 8&1/4 in below the bottom of the pipe and water was tricking into the sand filters. Fueled and started generator to get water flowing to the plant.

Today aug 9 water levels are 9&1/4 in Below thy bottom of the pipe and water tricking in to the sand filters. Started and fueled generator and got water flowing to the plant. Pond is getting very low on water. Picture attached is from today.

Aug 10

I'm (John Webber) sending this on behalf of the meeting Charles, James, Darren and I had in Bridgetown this morning on the plan we have to supply Margaretsville with water from Bridgetown.

-Water is being taken buy new school in Bridgetown. This water is treated and has a pH of 7.90 to 8.00 and has a chlorine residual of about 0.77 and an acceptable Turbidity of (0.8 NTU).

-Truck hold 3400 IMP Gallons (15.4 M3) if he is able to maneuver a trailer in the plant he will use a trailer to increase volume per load.

-Truck is Stainless steel and has backflow prevention on the truck. This truck is for potable water only.

-Charles will be sampling water on each truck load that leaves Bridgetown and recording volumes, Time, and water quality samples.

-Water will then be pumped into the sand filters into the raw water side.

- water will blend with the existing raw water and filter through the sand filter media and proceed to be chlorinated and stored into the reservoir.

-Margaretsville has a pH of 6.90. We do not have pH adjustment at this facility.

-The Margaretsville distribution has 80% DI and 20% Plastic. All service lines are Polyethylene. There is no lead services.

James could you provide the most recent Standard Water Analysis sampling for the two sites?

I talked to Tom Cameron from AQUA DATA about the leak detection they did last Wednesday. He is still analyzing the data and appears to be 2 leaks on Seaman St. he has sent the data to his experts to narrow down the location. This has been very difficult whereas the mains are ductile and the service lines are poly material. Hopefully we will hear more today.

Aug 22

Was in this morning to check over the distribution water quality after the work that was done yesterday. All levels of water quality are more than acceptable. I did open the Seaman St. line a bit more than normal to flush anything out after construction (no hydrant on the tail end of this system). Water pressure was not lost at any time during the repair we were able to fix the service live.

There was a lady that had concerns about her water being dirty further down on Seaman St. Matt had given her some bottled water and mentioned that we were repairing a leak and if she had other concerns to call the office. The water quality in our main has not been dirty I have been testing it regularly. If she is having continued issues I would assume she is having her own plumbing issues maybe hot water tank not drained or an old filter that hasn't been changed. We have not received any other complaints from neighbors that I know of. Was there a follow up or resolve with her Steve?

Margaretsville update as of Aug 25/20

- Margaretsville water supply is still off and is regenerating at a slow rate back into the open reservoir
 - The community has been given a water conservation notice
 - We are still trucking water from Bridgetown.
- Both leaks have been repaired in the distribution system (service lines at #16 seaman St., #110 Seaman St.)
 - Our daily consumption is roughly 70M3 per day down from 140M3.
- All sampling protocols have been followed as per sampling plan and are below operational allowances.
 - A Standard water analysis was taken today and has been sent to AGAT labs.
- Residence also have access to bottled water at the fire hall to help aid consumption and in case of a down turn in water quality.

Sept 2 We are still trucking water from Bridgetown, Water supply In the upper pond is still slowly regenerating. I suspected a leak over the weekend but found that someone was using a huge amount of water, as the flow has now gone back to normal.

MODIFICATION TO CONTINGENCY PLAN, EMERGENCY NOTIFICATION OR PROCEDURE OR
LABORATORY CHANGE:

None

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RECORD OF ANY VIOLATIONS OF APPROVAL AND CORRECTIVE ACTIONS TAKEN:

None

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SUMMARY OF COMPLAINTS RECEIVED AND CORRECTIVE ACTIONS:

None

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REVIEW OF QA/QC PROGRAM TO VALIDATE PLANT INSTRUMENT AND FACILITY LAB:

Here at the county we use all the same on line monitors.

For on line chlorine we use models CL 17. These units are cleaned once a month to insure true readings. We double check all readings 4 – 5 times week depending on holidays. We check the readings using DR2000 spectrophotometers or DR 2800 spectrophotometers.

Turbidity we use Hach 1720c and 1720e model on line turbidity meters. The units are cleaned once a month. All units are double checked at least 4-5 times a week depending on holidays. The units we use to double check the readings are bench model 2100n turbidity meters. All sites have calibration tubes to calibrate the 2100n.

Ph probes are used.

Operators are required to submit their chlorine counts to the ODRC at least once a week to insure no low chlorine residuals are found.

All month end reports are sent to the ODRC.

Month end reports are then sent to the Municipal operations supervisor.

APPENDIX A: Health-related Guidelines for Canadian Drinking Water Quality (Section 35 of Regulations)

Parameter	Health based guideline (mg/l)	Raw mg/l (maximum this year)	Treated mg/l (maximum this year)	Date	Location
aldicarb	0.009				
aldrin + dieldrin	0.0007				
aluminum	0.1 or 0.2				
antimony	0.006				
arsenic	0.010				
atrazine + metabolites	0.005				
azinphos-methyl	0.02				
barium	1				
bendiocarb	0.04				
benzene	0.005				
benzo[a]pyrene	0.00001				
boron	5				
bromate	0.01				
bromoxynil	0.005				
cadmium	0.005				
carbaryl	0.09				
carbofuran	0.09				
carbon tetrachloride	0.005				
chloramines (total)	3.0				
chlorate	1.0				
chlorite	1.0				
chlorpyrifos	0.09				
chromium	0.05				
cyanazine	0.01				
cyanide	0.2				
cyanobacterial toxins (as microcystin-LR) - surface water only	0.0015				

Parameter	Health based guideline (mg/l)	Raw mg/l (maximum this year)	Treated mg/l (maximum this year)	Date	Location
diazinon	0.02				
dicamba	0.12				
1,2-dichlorobenzene	0.2				
1,4-dichlorobenzene	0.005				
1,2-dichloroethane	0.005				
1,1-dichloroethylene	0.014				
dichloromethane	0.05				
2,4-dichlorophenol	0.9				
dichlorophenoxyacetic acid,(2,4-D)	0.1				
diclofop-methyl	0.009				
dimethoate	0.02				
dinoseb	0.01				
diquat	0.07				
diuron	0.15				
fluoride	1.5				
glyphosate	0.28				
Haloacetic Acids (HAAs)	0.080				
lead	0.01				
malathion	0.19				
mercury	0.001				
methoxychlor	0.9				
metolachlor	0.05				
metribuzin	0.08				
monochlorobenzene	0.08				
nitrate - nitrogen	10				
nitrilotriacetic acid (NTA)	0.4				
paraquat (as dichloride)	0.01				
parathion	0.05				
pentachlorophenol	0.06				

Parameter	Health based guideline (mg/l)	Raw mg/l (maximum this year)	Treated mg/l (maximum this year)	Date	Location
phorate	0.002				
picloram	0.19				
selenium	0.01				
simazine	0.01				
terbufos	0.001				
tetrachloroethylene	0.03				
2,3,4,6-tetrachlorophenol	0.1				
trichloroethylene	0.005				
2,4,6-trichlorophenol	0.005				
trifluralin	0.045				
trihalomethanes (THM's)	0.100				
turbidity	See Approval				
uranium	0.02				
vinyl chloride	0.002				
Gross alpha	0.5 Bq/L				
Gross beta	1 Bq/L				
Lead 210	0.2 Bq/L				
Has any of the parameter exceeded Guidelines Yes..... No.....					
If Yes provide date of occurrence and date when Department was notified:					
Action taken:					
Certified Lab: AGAT					

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