Department of Health & Human Services
Maine Center for Disease Control and Prevention
Drinking Water Program
Coliform Bacteria Level 2 Assessment Form

PWS ID#: ME0091010 PWS Name: Monhegan Water Company	Source Water: Groundwater
System Type: COM ☐ NTNC ☐ TNC ☑ SEASONAL: YES ☐ NO ☑	PWS Address:
Primary Operator (print name): Jason Patterson Phone:	Katahdin Valley Health Center 529 South Patten Road Patten, ME 04765
Person who collected TC samples if different than Primary Operator: Phone:	
State Personnel Consulted For Assessment: Haley Ward, Inc. Phone: 207-989-4824	
Assessment trigger date: 8/12/2022 Laboratory Notification Date: 8/8/2022	
Date Assessment Completed: 9/11/2022	

Assessment Elements	Reviewed? Y	Reviewed? N	Reviewed? N/A	Issues? Y	Issues? N	Issue Description	Corrective Action Taken and Date
1. Were there any events that may have caused system upset prior to collection of TC samples?						**Indicate Element number being described.**	
1.1 Were there any operation and maintenance activities that could have introduced total coliforms/ E. coli?	☑	☐	☐	☐	☑	1.6- Chlorine residuals at points furthest from the storage tanks and in isolated portions of the distribution system, are difficult to maintain.	
1.2 Has there been a fire fighting event, flushing operation, sheared hydrant, etc.?	☑	☐	☐	☐	☑		
1.3 Has there been any vandalism and/or unauthorized access to facilities?	☑	☐	☐	☐	☑		
1.4 Are there any visible indicators of unsanitary conditions?	☑	☐	☐	☐	☑		
1.5 Have there been any TC+ samples that were not compliance samples, including source samples?	☑	☐	☐	☐	☑		
1.6 Have there been any sites with low or inadequate disinfectant residual? Are there sites where it is difficult to maintain a residual without flushing?	☑	☐	☐	☑	☐		
1.7 Have any other measured water quality parameters been out of normal ranges?	☑	☐	☐	☐	☑		
1.8 Has there been a past history of TC+ or E. coli in distribution system (esp. in the last 12 months)?	☑	☐	☐	☐	☑		
1.9 Did the water system receive any RTCR monitoring violations in the past 12 months? If yes, when.	☑	☐	☐	☐	☑		
1.10 Have there been any reports of community illness suspected of being waterborne (e.g., Does the community public health official indicate that an outbreak has occurred.)	☑	☐	☐	☐	☑		
1.11 Other comments on records and maintenance?	☑	☐	☐	☐	☑		
2. Have there been any recent operational changes to the system?							
2.1 Have any new sources or inactive sources (e.g., auxiliary systems) recently been introduced into the system?	☑	☐	☐	☐	☑	2.2- The chlorine pump had malfunctioned overnight, causing a loss of disinfection.	[illegible]
2.2 Is there evidence of any potential sources of contamination (main breaks, low pressure, high turbidity, loss of disinfection, etc.)?	☑	☐	☐	☑	☐		
2.3 If it is a seasonal system, were there any problems during the most recent start-up procedure?	☑	☐	☐	☐	☑		

Assessment Elements	Reviewed? Y	Reviewed? N	Reviewed? N/A	Issues? Y	Issues? N	Issue Description	Corrective Action Taken and Date
3. Source – Well							
3.1 Is the sanitary seal intact?	✔				✔		
3.2 Is the well cap vented and is the vent screened?	✔				✔		
3.3 Does the vent and pump to waste terminate in an approved air gap?			✔				
3.4 Are there any unprotected cross connections at the wellhead?	✔				✔		
3.5 How is the well used? (Circle if applicable)	✔		✔ Primary	Backup	Emergency	Not a PWS	Not Drinking Water
3.6 How far does the casing extend above grade?	✔					Height: 16.5"	
3.7 Is there evidence of standing water near the wellhead?	✔				✔		
3.8 Is the wellhead secured to prevent unauthorized access?	✔				✔		
3.9 Have there been any sewer spills, source water spills or other disturbances?	✔				✔		
3.10 Other comments on the well system. (Are there aspects of well construction and operation that would bear on observed positives?)	✔				✔		
4. Source - Surface Water Supply							
4.1 Have there been any sewer spills, source water spills or other disturbances?			✔				
4.2 Have there been any algal blooms?			✔				
4.3 Has source water turnover occurred?			✔				
4.4 Other source water comments			✔				
5. Environmental Events							
5.1 Has there been heavy rainfall / flooding / rapid snowmelt?	✔				✔		
5.2 Have there been changes in available source water (e.g., significant drop in water table, well levels, reservoir capacity, etc.)	✔				✔		
5.3 Have there been any extremes in heat or cold?	✔				✔		
6. Evaluate sample site.							
6.1 Describe the location and condition of the tap	✔				✔	6.1/6.2- Raw water tap is plain end hose bib type valve prior to check valve and well tank located in the mech. room. Sample taps are lav. fixtures in various bathrooms of the facility and kitchen sink in the breakroom. Sample sites are in good condition and most locations are used daily. 6.4/6.5-Connection to boiler feed is protected by a Watts 9D dual check valve with an intermediate atmospheric vent.	
6.2 What is the regular use of the connection? (Provide comments)	✔				✔		
6.3 Describe any plumbing breaks, changes or construction in vicinity of sample site.			✔				
6.4 Are there any identified cross connections after the service connection or in premises plumbing. Describe if present.	✔				✔		
6.5 Were all of the backflow prevention devices at the sample location operational and maintained?	✔				✔		
6.6 Were there any low pressure events or changes in water pressure after the service connection or in the premises plumbing? If yes, when?	✔				✔		
6.7 Describe any treatment devices after the service connection or in the premises of the sample site?			✔				

Assessment Elements	Reviewed?			Issues?		Issue Description	Corrective Action Taken and Date
	Y	N	N/A	Y	N		
7. Sample protocol followed and reviewed. -flush tap -remove aerator -no swivel -fresh sample bottles -sample storage acceptable	☑	☐	☐	☐	☑		
8. Treatment Process (if applicable)							
8.1 Have there been any interruptions in treatment processes from power outages or other causes? If yes, provide details for which part, when and for how long?	☑	☐	☐	☑	☐	8.1/8.2- The UV Treatment systems quartz sleeve had accumulated a layer of fouling which reduced UV light penetration through the water column, in-turn lowering the disinfection performance.	The UV Treatment system quartz sleeve was removed and cleaned. See additional comments below.
8.2 Are treatment devices operational and maintained?	☑	☐	☐	☑	☐		
8.3 Has there been any recent installation or repair of treatment equipment?	☑	☐	☐	☐	☑		
8.4 Were there any recent changes in the treatment process (e.g., addition of a process, change in chemical or dosage)? If yes, provide details for the change and when it occurred?	☑	☐	☐	☐	☑		
8.5 What is the free chlorine residual measured immediately downstream from the point of application?						Residual:_____	
8.6 Did a review of the filter turbidity profiles reveal any anomalies?	☐	☐	☑	☐	☐		
8.7 Were there any failures to meet the C x T calculations?	☐	☐	☑	☐	☐		
8.8 Were the flow rates above the rated capacity?	☑	☐	☐	☐	☑		
8.9 Were there any anomalies of the settled water turbidities?	☐	☐	☑	☐	☐		
8.10 Other comments on the treatment system.	☑	☐	☐	☐	☑		
9. Distribution System							
9.1 System pressure: Is there evidence that the system experienced low or negative pressure prior to sampling ? If yes, describe event and when it occurred.	☑	☐	☐	☐	☑		
9.2 Have there been any water main breaks? If yes, when?	☑	☐	☐	☐	☑		
9.3 List any identified unprotected cross connections.	☑	☐	☐	☐	☑		
9.4 Pump station: Are there any significant deficiencies in the pump station? Are pump(s) operable?	☐	☐	☑	☐	☐		
9.5 Last pump maintenance/service date.	☐	☐	☑	☐	☐		
9.6 Air relief valves: Is the valve vault subject to flooding or does the vent terminate below grade?	☐	☐	☑	☐	☐		
9.7 Fire hydrant/blow off: Are any located in an area with a high water table or pits?	☐	☐	☑	☐	☐		
9.8 Is the distribution system secured to prevent unauthorized access?	☑	☐	☐	☐	☑		
9.9 Are the backflow prevention devices at high risk sites present, operational and maintained?	☑	☐	☐	☐	☑		
9.10 Have there been any water main repairs or additions? If yes when, and what was the repair or addition?	☑	☐	☐	☐	☑		
9.11 Was there any scheduled flushing of the distribution system? If yes, when?	☑	☐	☐	☐	☑		
9.12 Is there any evidence of intentional contamination in the distribution system?	☑	☐	☐	☐	☑		
9.13 Other comments on the distribution information.	☑	☐	☐	☐	☑		

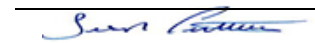
Assessment Elements	Reviewed?			Issues?		Issue Description	Corrective Action Taken and Date
	Y	N	N/A	Y	N		
10. Storage Tank							
10.1 Are the overflow and vents properly screened?	☐	☐	☑	☐	☐		
10.2 Is the facility secured to prevent unauthorized access?	☐	☐	☑	☐	☐		
10.3 Does the access opening have the proper gasket and seal tightly?	☐	☐	☑	☐	☐		
10.4 Does the drain/overflow line terminate at a minimum of 12" air gap?	☐	☐	☑	☐	☐		
10.5 Is the vent turned down and maintaining an approved air gap at the termination point?	☐	☐	☑	☐	☐		
10.6 Were there any observed leaks? Are there any unsealed openings in the storage facility, such as access doors, vents or joints?	☐	☐	☑	☐	☐		
10.7 Was there any observed physical deterioration of the tank? Could the physical condition of tank be a source of contamination?	☐	☐	☑	☐	☐		
10.8 If present, is the pressure tank maintaining an appropriate minimum pressure?	☐	☐	☑	☐	☐		
10.9 Has proper O&M been performed per appropriate schedule?	☐	☐	☑	☐	☐		
10.10 Has there been any recent facility maintenance (i.e. painting/coating)? If yes, when?	☐	☐	☑	☐	☐		
10.11 Does the tank "float" on the distribution system or are there separate inlet and outlet lines?	☐	☐	☑	☐	☐		
10.12 What is the measured chlorine residual (total/free) of the water exiting the storage tank today?	☐	☐	☑	☐	☐		
10.13 Is there any evidence of intentional contamination at the storage tank?	☐	☐	☑	☐	☐		
10.14 Other comments on the storage system	☐	☐	☑	☐	☐		

Additional Comments:

The UV Treatment system, at the facility, has been in-place since the Fall of 2018. In September of 2019 the UV lamp was replaced and the quartz sleeve was cleaned. Since that time, the quartz sleeve had not been cleaned. Following the positive TC sample in December of 2019, the UV treatment unit was inspected and a build-up on the quartz sleeve was observed, which reduces the effectiveness of the treatment system. The sleeve had been cleaned on a monthly basis, rather than a quarterly cleaning. Presently, the quartz sleeve will be cleaned weekly to further reduce build-up within the sleeve.

Certification: I certify under penalty of law that I am the person authorized to fill out this form, and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

Print Name: _____ Title: Project Scientist

Signature:  Date: 6/11/2020

Phone #: 207-991-2474 Email: JPatterson@cesincusa.com

Other Parties Present: John Kearns

Please return this form to: **Maine Drinking Water Program, 11 SHS, Augusta, ME 04333**

Reserved for ME DWP Review

	Yes	No	Comments
1. Has assessment been successfully completed?	☐	☐	
2. Likely reason for TC+ occurrence has been found.	☐	☐	
3. System has corrected the problem.	☐	☐	
4. Name of DWP reviewer:			