

North Shore Water Utility Nelson Ltd. Monthly Report

To: Pouria Mojtahedi, Large Water Systems Environmental Health Officer, Interior Health Authority
From: Aqua Diversities Waterworks Inc.
Date: November 7th, 2024
Re: Monthly Report for North Shore Water Utility - **October 2024**

This document includes the following items as part of the monthly report for the North Shore Water Utility Nelson Ltd. (NSWU):

- 1.0 Daily Water Consumption**
- 2.0 Microbiological Test Results**
- 3.0 Operator Log Sheets and Water Quality Events**
- 4.0 Major Operational Events**
- 5.0 Records of Customer Feedback and Response**

Submission of this report is to enhance communication with the local Environment Health Officer (EHO) and meet requirements for status compliance on the conditions summarized in the Operating Permit.

1.0 Daily Water Consumption

Total water consumption in October was 6,039m³; average daily consumption was 194.8m³/day. The average flow was 8.11m³/hr.

2.0 Microbiological Test Results

A sample from both ends of the distribution system is collected and submitted to an accredited laboratory for bimonthly microbiological testing.

All monthly testing results satisfy the Maximum Allowable Concentration (MAC) standard as set out by the Guidelines for Canadian Drinking Water Quality (GCDWQ).

See **Appendix A** for Laboratory Results

3.0 Operator Log Sheets and Water Quality Events

NSWU continues to be tested on an every-other-day schedule as specified by the EHO. The log sheets include comments on the source, treatment, and distribution system events. Log sheets also include information on the weather for the corresponding test date, which helps correlate weather events to turbidity levels. Throughout the month of October, chlorine residuals were maintained above 0.2 mg/L across the distribution system.

See **Appendix B** for Operator Log Sheets.

4.0 Major Operational Events

No major operation events for the month of October.

Note that the pilot plant located in the Isaac Creek reservoir building continues to operate with the treated water going to waste (as per direction from EHE Marianne Crowe).

5.0 Records of Customer Feedback and Response

There were a few customer inquiries regarding the temporary housing at the North Shore Inn (Hwy 3A) in the month of October, these were responded to by e-mail and by phone.

Report Reviewed by:



Nicole Ward, BSc.P.Ag. Project Manager

Appendix A

Laboratory Results

ANALYTICAL RESULTS

Sample ID	Main Jet			Sample #	1
Date/Time Sampled	2024-10-22	11:00 AM	Matrix TW	Temperature on Receipt	10
Date/Time on Test	2024-10-22	4:45 PM			
<u>Analyses</u>		<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total		less than 1	CFU/100mL	1	
Verified E.coli		less than 1	CFU/100mL	1	

Sample ID	NCCS 570 Johnstone Rd.			Sample #	2
Date/Time Sampled	2024-10-22	11:00 AM	Matrix TW	Temperature on Receipt	11
Date/Time on Test	2024-10-22	4:50 PM			
<u>Analyses</u>		<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total		less than 1	CFU/100mL	1	
Verified E.coli		less than 1	CFU/100mL	1	

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Public Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW = Treated water, DW = Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

ANALYTICAL RESULTS

Sample ID	Main Jet			Sample #	1	
Date/Time Sampled	2024-10-08	11:00 AM	Matrix	TW	Temperature on Receipt	10

Date/Time on Test 2024-10-08 4:35 PM

<u>Analyses</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID	NCCS 570 Johnstone Rd.			Sample #	2	
Date/Time Sampled	2024-10-08	11:00 AM	Matrix	TW	Temperature on Receipt	12

Date/Time on Test 2024-10-08 4:40 PM

<u>Analyses</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
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CFU/100mL	Colony Forming Units per 100 milliliters
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References

Appendix B

Operator Log Sheet

Date	Time	Cl2 Pump Setting	CL2 pump duration	CL2 pump frequency	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	Cl2 Pump Setting	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.)	CL2 Residual (Dist.)	Flow Meter Reading	Comments	Weather	
		Isaac Cr. (1-10)			Isaac Cr. NTU	Isaac Cr. mg/L	Sutherland Cr. (1-10)	Sutherland Cr. NTU	Sutherland Cr. mg/L	mg/L	mg/L			Precip./Temp.	Sampled By
YY/MM/DD	24:00:00												Microbiological Sample Taken/Filter Change/Etc.		
10/6/2024	8:00		11.00	12.00	0.69	0.69	-	-	-	-	-	-	remote monitoring		OH
10/7/2024															
10/8/2024	1:00		11.00	12.00	0.84	0.62	-	-	-	0.68	0.52	73739	took microbac samples, tested north shore, fill isaac ch	21 cloudy	OH
10/9/2024															
10/10/2024	11:00		11.00	12.00	0.74	0.64	-	-	-	0.53	0.51	74152	tested north shore	15 cloudy	OH
10/11/2024															
10/12/2024			11.00	12.00	0.65	0.65	-	-	-	-	-	74660	remote monitoring		OH
10/13/2024															
10/14/2024															
10/15/2024	11:00		11.00	12.00	0.68	0.73	-	-	-	0.83	0.68	15180	tested north shore	13 cloudy	OH
10/16/2024															
10/17/2024	9:30		11	12	0.66	0.63	-	-	-	0.79	0.54	75567	tested north shore, added 1 carboy of chlorine to reser	4 cloudy	OH
10/18/2024															
10/19/2024	8:00		11	12	0.62	0.8						76085	remote monitoring		OH
10/20/2024															
10/21/2024															
10/22/2024	11:30		11	12	0.64	0.71	-	-	-	0.57	0.33	76593	took microbac samples, tested north shore	7 sunny	OH
10/23/2024															
10/24/2024	1:00		11	12	0.7	0.7	-	-	-	0.64	0.53	77003	Tested north shore, added 1 carboy of chlorine to reser	6 cloudy	OH
10/25/2024															
10/26/2024	8:00		11	12	0.44	0.51	-	-	-	-	-	-	remote monitoring		OH
10/27/2024															
10/28/2024															
10/29/2024	10:00		11	12	0.51	0.66	-	-	-	0.36	0.59	77980	Tested north shore, brought 3 carboys to isaac, cleaned	4 sunny	OH
10/30/2024															
10/31/2024	3:00		11	12	0.47	0.79	-	-	-	0.56	0.53	78305	Tested north shore, added 2 carboys of chlorine to the	5 rain	OH
Reading of flow meter for Sunny Side trailer court (to be recorded once a month)						42313		Date:	10/1/2024						