

North Shore Water Utility Nelson Ltd. Monthly Report

To: Jennifer Beverly- Large Water Systems Environmental Health Officer, Interior Health Authority
From: Aqua Diversities Waterworks Inc.
Date: January 6th, 2025
Re: Monthly Report for North Shore Water Utility - **December 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 December was 5,565m³; average daily consumption was 179.5m³/day. The average flow was 7.47m³/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 December, 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 December.

5.0 Records of Customer Feedback and Response

There were no customer inquiries in the month of December.

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	2024-12-18	11:00 AM	Matrix	TW	Temperature on Receipt	11
Date/Time on Test	2024-12-19	2:55 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	2024-12-18	11:00 AM	Matrix	TW	Temperature on Receipt	11
Date/Time on Test	2024-12-19	3:00 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	Villa Motel			Sample #	1
Date/Time Sampled	2024-12-30	11:00 AM	Matrix	TW	Temperature on Receipt 8
Date/Time on Test	2024-12-30	4:25 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	538 Johnstone Rd			Sample #	2
Date/Time Sampled	2024-12-30	11:00 AM	Matrix	TW	Temperature on Receipt 7
Date/Time on Test	2024-12-30	4:30 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	

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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	Sampled By
YY/MM/DD	24:00:00	Isaac Cr			Isaac Cr. NTU	Isaac Cr. mg/L	Sutherland Cr. (1-10)	Sutherland Cr. NTU	Sutherland Cr. mg/L	mg/L	mg/L	m3/Hr	Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.	
12/1/2024															
12/2/2024															
12/3/2024	12:00	-	11.00	12.00	0.9	0.59	-	-	-	0.56	0.37	84790	take microbac samples, testing north shore	2 cloudy	OH
12/4/2024															
12/5/2024	10:30	-	11	12	0.79	0.86	-	-	-	0.69	0.68	85150	test north shore, deliver 5 carboys chlorine to issac re	2 cloudy	OH
12/6/2024															
12/7/2024	8:00	-	11.00	12.00	0.55	0.9	-	-	-	-	-				
12/8/2024														2 cloudy	FD
12/9/2024															
12/10/2024															
12/11/2024	2:30	-	8.00	12.00	0.67	1.02	-	-	-	0.73	0.71	68309.00		-2C, cloud	FD
12/12/2024															
12/13/2024	3:30	-	11.00	12.00	0.68	0.77	-	-	-	2.2	2.05	86643	Chlorine pump failed and was overdosing, replaced tu	3C cloudy	OH FD
12/14/2024															
12/15/2024															
12/16/2024															
12/17/2024	8:00	-	11	12	0.64	0.99	-	-	-	0.65	0.5	87438	Tested north shore		OH
12/18/2024															
12/19/2024															
12/20/2024															
12/21/2024	8:00	-	11	12	0.79	0.96	-	-	-	-	-	-			FD
12/22/2024															
12/23/2024	4:00	-	11	12	0.3	0.8	-	-	-	0.7	0.65	88555		2C cloud	FD
12/24/2024															
12/25/2024															
12/26/2024															
12/27/2024	11:00	-	11	12	0.33	0.94	-	-	-	0.71	0.65	-	Topped up CL2, calibrated CL2 analyzer as it was readi	1C snow	FD
12/28/2024	8:00	-	11	12	0	0.88	-	-	-	-	-	89411		1C snow	FD
12/29/2024															
12/30/2024	11:00		11	12	0.3	0.8	-	-	-	0.37	0.37	89791	Tested north shore, take microbac samples	1C cloudy	OH
12/31/2024	8:00		10	12	0.29	1.1	-	-	-	-	-	-	Decreased cl2 pump run time		FD
Reading of flow meter for Sunny Side trailer court (to be recorded once a month, U Dec 3rd															
										Date:	6488.4				