

## North Shore Water Utility Nelson Ltd. Monthly Report

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**To:** Pouria Mojtahedi, Large Water Systems Environmental Health Officer, Interior Health Authority  
**From:** Aqua Diversities Waterworks Inc.  
**Date:** September 5<sup>th</sup>, 2024  
**Re:** Monthly Report for North Shore Water Utility - **August 2024**

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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 August was 8,359m<sup>3</sup>; average daily consumption was 269.6m<sup>3</sup>/day. The average flow was 11.23 m<sup>3</sup>/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 August, chlorine residuals were maintained above 0.23 mg/L across the distribution system.

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

#### **4.0 Major Operational Events**

There were no major operational events in the month of August.

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 no customer inquiries in the month of August.

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	2024-08-27	11:00 AM	Matrix TW	Temperature on Receipt	14

Date/Time on Test 2024-08-27 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	2024-08-27	11:00 AM	Matrix TW	Temperature on Receipt	11

Date/Time on Test 2024-08-27 4:45 PM

<u>Analyses</u>	<u>Result</u>	<u>Units</u>	<u>RDL</u>
Coliforms, Total	10	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	NCCS 570 Johnstone Rd.			Sample #	1	
Date/Time Sampled	2024-08-29	12:35 PM	Matrix	DW	Temperature on Receipt	12
Date/Time on Test	2024-08-29	6:00 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	Main Jet			Sample #	1
Date/Time Sampled	2024-08-13	11:00 AM	Matrix	TW	Temperature on Receipt 10

Date/Time on Test 2024-08-13 5:15 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	2024-08-13	11:00 AM	Matrix	TW	Temperature on Receipt 10

Date/Time on Test 2024-08-13 5:20 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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RDL	Reportable Detection Limit

### 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. (1-10)			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.	
8/1/2024	1:30	-	9:00	10:00	0.99	0.68	8	0.78	0.52	0.72	0.54	56670	tested north shore, took chem analysis samples	30 sunny	OH
8/2/2024															
8/3/2024															
8/4/2024															
8/5/2024															
8/6/2024	2:00	-	9:00	10:00	0.87	0.67	8	0.75	0.62	0.85	0.35	58109	tested north shore, added 1 carboy of cl2 to reservoir,	28 sunny	OH
8/7/2024															
8/8/2024															
8/9/2024	12:00	-	9:00	10:00	0.84	0.68	8	0.82	0.77	0.58	0.03	-	NCCS low Cl2, tightend cl2 pump tube at sutherland to ensure no bub		OH
8/10/2024	7:51	-	9:00	10:00	0.91	0.64	8	-	-	-	-	-	remote monitoring		OH
8/11/2024															
8/12/2024	11:00	-	-	-	-	-	8	0.75	0.77	-	-	-	Batch dose sutherland reservoir to bring up cl2 over 1.0		OH
8/13/2024	11:00	-	9:00	10:00	0.67	0.75	8	0.77	0.53	0.67	0.48	60072	Batch dose sutherland 350 to bring over 1.0, tested no	25 sunny	OH
8/14/2024															
8/15/2024	12:00	-	9:00	10:00	0.66	0.6	8	0.6	0.9	0.56	0.34	-	add 200ml of chlorine to sutherland to bring residual over 1,		OH
8/16/2024															
8/17/2024	7:51	-	9	10	0.52	0.73	8	-	-	-	-	-	remote monitoring		OH
8/18/2024															
8/19/2024															
8/20/2024	11:30	-	9	10	0.65	0.7	9	0.76	0.81	0.72	0.45	61920	Tested north shore, batch dose sutherland 150ml cl to	24 sunny	OH
8/21/2024															
8/22/2024	10:30	-	9	10	0.85	0.56	9	0.54	0.75	0.53	0.25	62424	Tested North shore, added 1 carboy of cl to Issac, batch	22 sunny	OH
8/23/2024															
8/24/2024															
8/25/2024															
8/26/2024	10:00		9	10	0.6	1	9	0.53	1.6				Throttled sutherland intake valve as it was draining intake		FD/JK
8/27/2024	1:00		9	10	0.58	0.84	9	0.62	1.4	0.64	0.63	63951	submitted MicroBac samples	15 rain	FD/JK
8/28/2024															
8/29/2024	1:00		9	10	-	-	9	0.65	0.99	-	0.23		resubmitted MicroBac samples for NCCS	22 sunny	OH
8/30/2024															
8/31/2024															
Reading of flow meter for Sunny Side trailer court (to be recorded once a month)						2054.1		Date:	Aug 6						