

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: October 2nd, 2024
Re: Monthly Report for North Shore Water Utility - **September 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 September was 7,032m³; average daily consumption was 234.4m³/day. The average flow was 9.76m³/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 September, 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

480 Johnstone Road --the hydrant was moved to the other side of the driveway and the leak in the line was repaired. This was a multi-day maintenance project, and work schedule was communicated directly with the effected customers.

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 September.

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	2024-09-10	11:00 AM	Matrix	TW	Temperature on Receipt	10
Date/Time on Test	2024-09-10	5:05 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	2024-09-10	11:00 AM	Matrix	TW	Temperature on Receipt	10
Date/Time on Test	2024-09-10	5:10 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	2024-09-24	11:00 AM	Matrix	TW	Temperature on Receipt	12

Date/Time on Test 2024-09-24 5:00 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

Sample ID	NCCS 570 Johnstone Rd.				Sample #	2
Date/Time Sampled	2024-09-24	11:00 AM	Matrix	TW	Temperature on Receipt	12

Date/Time on Test 2024-09-24 5:05 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

Month: Sep-24

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
9/1/2024	24:00:00														
9/2/2024							9								
9/3/2024														25C sun	FD
9/4/2024	1:00		9:00	10:00	0.62	0.66	7	0.59	1.90	0.64	0.68	65750			
9/5/2024															
9/6/2024	10:00		9:00	10:00	0.52	0.74	5	0.69	1.59	0.47	0.37	66159	added 2 carboys of cl2 to issac reservoir, decreased sut	23c sunny	OH
9/7/2024															
9/8/2024	7:50		9:00	10:00	0.68	0.72	-	-	-	-	-	-	remote monitoring		OH
9/9/2024															
9/10/2024	2:00		9:00	10:00	0.53	0.76	5	0.48	1.08	0.57	0.5	67293	tested north shore, take microbac samples	25 cloudy	OH
9/11/2024															
9/12/2024	1:00		9:00	10:00	0.67	0.76	5	0.78	0.51	0.48	0.32	67799	tested north shore	18 cloudy	OH
9/13/2024															
9/14/2024	7:50		9:00	10:00	0.44	0.66	-	-	-	-	-	-	remote monitoring		OH
9/15/2024															
9/16/2024															
9/17/2024	11:00		9	10	0.48	0.63	-	-	-	0.46	0.2		drained sutherland, emptied sutherland cl2 reservoir and brought ex		OH
9/18/2024															
9/19/2024	12:00		9	19	0.68	0.61	-	-	-	0.42	0.28		added 2 carboys of cl to reservoir		
9/20/2024															
9/21/2024	7:50		9	10	0.66	0.4	-	-	-	-	-	-	remote monitoring, high chlorine alarms dosing was changed to 5 and		OH
9/22/2024															
9/23/2024															
9/24/2024	1:30		5	10	0.52	0.63	-	-	-	0.36	0.26	70768	tested north shore, took microbac samples	25 sunny	OH
9/25/2024			7	10									changed chlorine run time to 7, powere outage at night		OH
9/26/2024	2:30		9	10	0.2	0.3	-	-	-	0.48	0.38	71168	calibrated chlorine analyzer, tested north shore,	17	OH
9/27/2024															
9/28/2024															
9/29/2024															
9/30/2024															
Reading of flow meter for Sunny Side trailer court (to be recorded once a month)						34264	Date: September 1								