



TO: Mayor and Council

FROM: Alyshia Neuman, Manager of Works and Operations

DATE: July 8, 2021

RE: Monthly WTP Data Sheet – June 2021

BACKGROUND:

Permit Requirements:

Parameter	Treated water sampling and locations/ Minimum sampling frequency	Limit
Turbidity (NTU)	On-site testing at least once (1) per day from water entering the distribution system and at the same frequency and locations as bacteriological samples	Less than 1.0 NTU, 95% of discrete measurements each calendar month
Free Chlorine (FCL)	At least once (1) per day for free chlorine; and at the same locations and frequency of bacteriological samples	Free residual of not less than 0.1 Mg per litre in the water entering the distribution system
Total Chlorine (TCL)	At least once (1) per day for free chlorine; and at the same locations and frequency of bacteriological samples	A total chlorine residual of not less than 0.5 Mg per litre of a free residual of not less than 0.1 Mg per litre in the water throughout the distribution system
Iron	Once per day (aesthetic Objective)	0.05 Mg per litre
Manganese	Once per day (aesthetic Objective)	0.05 Mg per litre

ANALYSIS:

Parameter	High	Low
Turbidity (NTU)	1.26	0.16
Free Chlorine (FCL)	3.18	0.27
Total Chlorine (TCL)	3.78	0.39
Iron	0.43	0.00
Manganese (MN)	0.338	0.03

Water Usage:

	High	Low	Total for Month
Raw	979 m ³ per day	593 m ³ per day	23,252 m ³
Treated	874 m ³ per day	520 m ³ per day	19,663 m ³
Process			3,589 m ³

Notes:

- Iron was over our aesthetic objectives 7 days out of 31.
- We were over aesthetic objectives for manganese 29 days out of 30 this month. This was caused by filter overloading and pot perm dosages. This can cause slight discolouration in our distribution system.
 - We have been setting the filter valves to account for filter overloading and for the north filter valving having cavitation until this can be repaired and was done again on June 10th and again on the 17th. If we can eliminate the cavitation with replacing the valving and suction line this should clear up our filter overloading and be more consistent- One quote has been obtained and we are awaiting the second quote to adhere to the purchasing policy.
 - The drain valve is also in need of repair both these items are being worked on and quotes are being obtained- we currently have one quote and awaiting one more to adhere to the purchasing policy.
- We continue to closely monitor Raw NTU, iron, and manganese, as well as our filter turbidity dependent. This is not a permitted tested requirement but does help to analyze the rises and lows of our system.
- June 11th Retention cleaning was preformed and filled and drained twice to remove oxidized Iron to prepare for clear well cleaning.
- A precautionary Boil water was called on June 11th as there was scheduled clear well cleaning happening on the 12th and 13th of June. The job ran longer than expected due to the high sedimentation levels and had to continue the 19th and 20th. Several inches of sediment were removed from the outside reservoir at the WTP, and a rescheduled re-entry is being planned for the clear well, and pump well portion of the water treatment plant as access to do this safely was limited. Bacti samples were taken on the 22nd and 23rd in June to be removed from the PDWA. We were over compliance of our NTU but were under the PDWA so there was no concern and was a result of clear well cleaning.
- June 16th well rates were compared to WTP rates and where exact showing no lost water in the supply.
- Process numbers seem to be high this month which can be explained by the drain valve leaking or longer backwashes.

ATTACHMENT:

WTP Monthly Data Sheet- June 2021