

Kale Black, Sr. Drinking Water Officer
Office of Drinking Water, Manitoba Sustainable Development
309 – 25 Tupper Street North
Portage La Prairie, MB R1N 3K1

December 7, 2022

RE: CORRECTIVE ACTION REPORT FOR WINNIPEG PUBLIC WATER SYSTEM, 252.00

Incident No: CAR-07-2022-ESD

Reported to ODW: November 24, 2022

Reported by: Courtney Diduck, Analytical Services Branch Head

Approved by: Courtney Diduck, Analytical Services Branch Head

Incident Date: November 23, 2022

Incident Location: Winnipeg 3-Dist (SE03)

Incident Type:

1. High Positive Total Coliform (>10 per100mL), 3 MR 41/2007
2. Low Disinfectant Residual in Distribution System, 22(1) MR 40/2007

Description of Event:

During routine monitoring, a high positive total coliform was reported at SE03. During the additional sampling conducted as part of the corrective actions to the high positive, a low chlorine residual was found at the downstream location, which is the last service connection before a dead end in the system.

Corrective Actions:

Environmental Standards:

IMMEDIATELY: Contacted the ODW and re-sampled original location as well as upstream and downstream for bacteria, turbidity, free/total chlorine, and temperature. Low chlorine residual was found at the downstream location; Water Services operators were dispatched to flush the affected area and ESD staff collected additional samples. Monitoring was terminated after two consecutive sets of re-samples taken 24 hours apart tested negative for bacteria, and chlorine levels were re-established in the area.



**Water and Waste
Eaux et déchets**

Water Services & Engineering:

Responded to the low chlorine residuals found by ESD by spot flushing, running water to waste, and modelling the water quality data in the area.

Additional actions are being investigated and monitoring will continue until a long-term solution can be implemented.

Test Results: See attached

LIMS Reference No: Job_1381

EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER IN SITUATIONS REQUIRING IMMEDIATE REPORTING

N:\Environmental Standards\Analytical Services\Government Agencies\Office of Drinking Water\Corrective Action Reports



Sample Name	Sample Number	Date Sampled	E Coli (MPNU/100mL)	Total Coliform (MPNU/100mL)	Heterotrophic Plate Count (CFU/mL)	Free Chlorine (mg/L)	Total Chlorine (mg/L)	Turbidity-field (ntu)	Temperature (°C)	Time Sampled (hrs)
SE03	531630	23-Nov-22	0	130	22	0.97	1.19	0.16	9.4	15:10
SE03_Resample	532227	24-Nov-22	0	0	<1	0.89	1.14	0.15	8.6	15:35
SE03_Upstream	532228	24-Nov-22	0	0	<1	0.89	1.11	0.18	11.2	16:38
SE03_Downstream	532226	24-Nov-22	0	0	1	<0.02	0.02	0.30	9.8	16:22
WS_Hydrant	NA	24-Nov-22	NA	NA	NA	0.87	NA	1.02	NA	22:00
SE03_Resample 2	532424	25-Nov-22	0	0	<1	1.08	1.31	0.14	8.5	15:46
SE03_Resample 2 Dup	532431	25-Nov-22	0	0	1	n/a	n/a	n/a	n/a	15:46
SE03_Upstream 2	532425	25-Nov-22	0	0	<1	1.04	1.25	0.16	12.6	16:05
SE03_Downstream 2	532423	25-Nov-22	0	0	1	0.70	0.96	0.18	10.1	15:28
SE03	533358	30-Nov-22	0	0	1	0.93	1.18	0.14	9.1	15:03
SE03_Downstream 3	533345	30-Nov-22	0	0	14	0.03	0.26	0.47	10.4	11:30
SE03_Downstream 4a	533932	2-Dec-22	NA	NA	NA	0.55	0.70	0.19	10.9	11:56
SE03_Downstream 4b	533933	2-Dec-22	NA	NA	NA	0.57	0.82	0.28	10.6	12:05
SE03_Downstream 4c	533934	2-Dec-22	NA	NA	NA	0.29	0.59	0.49	9.9	11:33
SE03_Downstream 5a	534571	5-Dec-22	NA	NA	NA	0.41	0.31	0.31	10.7	16:00
SE03_Downstream 5b	534572	5-Dec-22	NA	NA	NA	0.41	0.26	0.26	10.5	15:59
SE03_Downstream 5c	534573	5-Dec-22	0	0	n/a	0.19	0.37	0.99	9.8	16:23

NOTES/COMMENTS:

1. All microbiological tests performed by contract laboratory.
2. OL - Autosampler or Process Offline
3. NA - Not Applicable