

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

January 7, 2025

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

Incident No: CAR-09-2024-WTP

Reported to ODW: December 7, 2024 @ 16:54

Reported by: Matthew Harrison, Water Treatment Operations Support Engineer

Approved by: Matthew Harrison, Water Treatment Operations Support Engineer

Incident Date: December 7, 2024

Incident Location: Winnipeg 2-Treated (WTP)

Incident Type: Water Entering Distribution System Exceeds Turbidity Standard, 6(1) MR 41/2007

Description of Event and Corrective Actions:

On Saturday, December 7 Filter 3 experienced a turbidity spike above 1.0 NTU. Prior to the event at 16:32:32, Filter 3 turbidity began to gradually rise. Filter 3 was taken offline at 16:34:23 when the turbidity reached 0.34 NTU. At 16:40:25 Filter 3 turbidity had returned to normal levels and the filter was brought back online. While the filter was being brought back online, the flow control valve opened more than what was required resulting in a surge of flow through the filter. The turbidity spiked, reaching a maximum of 1.46 NTU at 16:42:35 and was above 1.0 NTU for 26 seconds. The filter was taken offline at 16:42:35. All other treatment barriers including UV and chlorination remained online without issue during this event. The filter was set to backwash and the Instrumentation Technicians were called in to flush and clean the sample lines as corrective actions. Filter returned to normal operation after backwash.

Test Results:

Filter 3 analyzer readings: Pre-spike – 0.34 NTU and Post-Spike – 0.20 NTU

Post DAF readings: Train 1 – 0.56 NTU, Train 2 – 0.57 NTU

Other Filter analyzer readings during spike: Filter 1 - 0.09 NTU, Filter 2 - backwash, Filter 4 – 0.09 NTU, Filter 5 – 0.05 NTU, Filter 6 - 0.01 NTU, Filter 7 – 0.02 NTU, Filter 8 – 0.01 NTU

Chlorine analyzer readings during spike: Branch 1 – 1.37 mg/L, Branch 2 – 1.27 mg/L

Reference No: n/a

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