

CONTINGENCY PLAN
Township of Tay - QMS Operational Plan

Township of Tay Water Treatment & Distribution Systems

Element 8.4 – Risk Assessment Outcomes**Problem: Low Chlorine Adverse Notification Procedure**

Low Chlorine Leaving the Plant (less than 0.25 mg/L)

Inline chlorine analyzer measuring treated water leaving the plant indicates a chlorine level less than 0.25 mg/L.

1. Ensure high lift pumps are OFF as per shutdown set-point for low chlorine alarm residual.
2. Confirm results by testing samples from the high lift pump well and clearwell access points using handheld or bench top analyzer.
3. If chlorine level confirmed low, increase the chlorine dosage and monitor residual levels. Troubleshoot reason for low Cl₂.
4. Notify the ORO and/or Lead Hand.
5. Reporting required – follow Element 8.1 Adverse Water Condition and/or Other Problem.

Low Chlorine in Distribution System (less than 0.05 mg/L)

Testing at a location in the distribution system has provided results of less than 0.05 mg/L after 5 minutes of flushing.

1. Verify chlorine readings upstream and downstream in the distribution system.
2. Notify ORO and/or Lead Hand.
3. Reporting required – follow Element 8.1 Adverse Water Condition and/or Other Problem.
4. Flush hydrants as required to bring residual up to obtain required levels.
5. Monitor and sample as required or as directed by the Ministry.
6. Notify ORO and/or Lead Hand of progress.
7. Test other locations and continue to flush hydrants as necessary.

Inline Chlorine Analyzer Not Working Properly

1. Test the chlorine level at the analyzer feed line using the handheld portable or bench top analyzer.

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2. If chlorine is above the low level alarm set-point, continue to operate the plant and monitor.
3. If chlorine level is below the low level alarm set-point, increase the chlorine dosage and monitor until adequate residuals are reached.
4. Notify the ORO and/or Lead Hand.
5. Repair the chlorine analyzer and ensure adequate chlorine residual.
6. If the chlorine analyzer cannot be readily repaired then advise the ORO and/or Lead Hand.
7. If required, replace the chlorine analyzer.
8. If at any time the chlorine analyzer is not functioning, grab samples must be taken and tested every hour as set out in O. Reg. 170/03, and the Safe Drinking Water Act.
9. Reporting required – follow Element 8.1 Adverse Water Condition and/or Other Problem.