



Quality Assurance Form

Doc. #: WMS-CO-FR-0764
Issued: 14-Oct-2014
Revised: 29-Apr-2025
Revision #: 8.0
Page: 1 of 2

Approved by: Top Management – Tier 2

Continuous Feed Method Watermain Disinfection

Initial Form - first form submission ☐
Subsequent Form - continuing action [disinfection / sampling failed] ☐

All work must be performed in accordance with [WMS-OPS-SOP-1109, 1111](#) or [1709, WMS-CO-FR-0776](#), and related documents & standards

Company Performing Disinfection (Contractor or Peel): _____ Project #: _____

Location: _____ Peel Project Manager: _____

Peel Inspector: _____ Consultant Inspector: _____

COMPANY PERFORMING DISINFECTION (Contractor or Peel) to complete Sections A, B & C and page 2 in FULL

For Disinfection Contractor Use Only (*for all certified Operators)

Backflow Test Reports are to be filled out as per Peel requirements and e-mailed to ZZG-BackflowPrevention once complete

Pre-flush: Watermain Swabbed? Y / N by: (contractor) **Swabbing Date** (yy/mm/dd):

Initial Flushing (before chlorination) **Date** (yy/mm/dd): _____ **Time** (24:00): _____

Achieved flushing velocity of at least 0.91 m/s ☐ **OR** Flushed minimum 3 pipe volumes ☐ (check ONE)

Post-flush turbidity ^a: _____ NTU **Time** (24:00): _____ ^a Must be ≤1.0 NTU. If so, proceed with disinfection. If >1.0 NTU, test source.

Source turbidity ^b: (If applicable) NTU **Time** (24:00): _____ ^b If source ≤1.0 NTU, continue flushing. If source >1.0 NTU, proceed with disinfection.

Water Meter Readings (m³)	Initial:	Final:	Water Used:
	Name (print)	Signature	Initials *OWWCO Operator #
Operator in Charge			
Operator/Assistant 1			
Operator/Assistant 2			

Disinfection - Continuous Feed Method

Date (yy/mm/dd): _____

Final meter reading in Section A MUST be the same as Initial meter reading in Section B! DO NOT RESET DIGITAL METER!

Water Meter Readings (m³)	Initial:	Final:	Water Used:
	Name (print)	Signature	Initials *OWWCO Operator #
Operator in Charge			
Operator/Assistant 1			
Operator/Assistant 2			

After Contact Time/Final (dechlorination) **Flush** **Date** (yy/mm/dd): _____ **Time** (24:00): _____ **Min 24hr?** ^{*} (Y / N)

Final meter reading in Section B MUST be the same as Initial meter reading in Section C ^{*} Time (1st sample point) must be ≥ 24hr after LAST Time in Section B

Water Meter Readings (m³)	Initial:	Final:	Water Used:
	Name (print)	Signature	Initials *OWWCO Operator #
Operator in Charge			
Operator/Assistant 1			
Operator/Assistant 2			

Maximum allowable decrease[†] of total chlorine residual is 40% of initial chlorine (to a max of 50 mg/L), before flushing:

[†] a chlorine increase >5% is a FAIL COPPER* ☐ (*see note below Page 2 table) PASS ☐ FAIL[†] ☐

If residuals PASS, proceed to flushing **After Flush residuals are recorded on Page 2** ☐

After flush, residual at all locations is representative of local distribution ☐ [†] Must be independently collected from and before micro sampling

Discharge of water to the environment must comply with [Municipal Drinking Water Licence Schedule C](#)

	Name (print)	Signature	Initials	*OWWCO Operator #
Operator in Charge				
Operator/Assistant 1				
Operator/Assistant 2				

CONTRACTOR: Hand over this Form to Region of Peel Operations Staff to check Sections A and B are complete

Verification Sampling (Microbiological) All sampling must be performed in accordance with [WMS-CO-SOP-1107](#)

	Date (yy/mm/dd)	Time (24:00)	Sampler(s)	Employee #(s)	OIC Signature
"Initial" Samples		last sample collected			
"16-hr" Samples		first sample collected			

Approval to Connect to Distribution System BV Job# (Initial): _____ BV Job# (16-hr): _____

All sample results have been reviewed ☐ Date results reviewed (yy/mm/dd): _____

Results are within regulatory limits and pass Peel Standards (per [WMS-CO-PR-0515](#)) PASS ☐ FAIL[#] ☐

[#] If any sample result fails, Foreperson's direction is (check all that apply): ☐ Flush ☐ Swab ☐ Sample ☐ Disinfect

Signature below signifies that the entire form was reviewed, and all Sections pass requirements.

Approval is given to connect the watermain to the distribution system

(Circle One)	Name (print)	Signature - PASSED	Signature - FAILED
Foreperson/Designate			

Note: A Water Quality Analyst may be used for microbiological sampling and chlorine testing under Sections B, C and D

[^] If **DISINFECTION** fails, start another 'Watermain Disinfection Form', check 'Subsequent Form' box (top) & complete sections **A, B, C, D, E**

[#] If **SAMPLING** fails, start another 'Watermain Disinfection Form', check 'Subsequent Form' box (top) & complete sections as per Foreperson direction

OPERATIONS STAFF: Scan a copy of this form and email to the Region of Peel Project Manager, Disinfection Contractor, Peel Construction Inspector, ZZG-WWW Regulatory Compliance Records and ZZG-WaterQualityInquiries

Print Date: 31/01/25

THIS IS A CONTROLLED DOCUMENT

Location	Disinfection (Section B)				After “Post” Contact Time (before final flush) (Section C)						After Final (dechlorination) Flush (Section C) <i>Residuals must be tested outside of (i.e. before) verification (microbiological) sampling</i>				
	Date (yy/mm/dd)	Time (24:00)	Total Chlorine (mg/L)	Operator Initials	Date (yy/mm/dd)	Time (24:00)	Total Chlorine (mg/L)	Chlorine DECREASE [†] * (mg/L) [= Initial – Post]	Chlorine DECREASE (%) [†] [= (Initial - Post) ÷ Initial x 100%] No decimals, round up 0.5 or above, round down 0.4 and below	Operator Initials	Date (yy/mm/dd)	Time (24:00)	Chlorine (mg/L)		Operator Initials
													Free	Total	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															

Review & Revision History

Date	Revision #	Reason for Review/ Revision
14-Oct-2014	0.0	Original Issue
26-Aug-2015	1.0	Revised based upon approved Staff Suggestion, compliance requirements, and formatting improvements
13-Oct-2015	1.1	Revised based upon staff input from first uses of version 1.0 in the field. Direction added for paperwork flow.
11-Oct-2016	2.0	Revised per new 'MOECC Watermain Disinfection Procedure'; added OWWCO Operator # (For Contractor Use Only); added section letters, checkbox at top INITIAL vs SUBSEQUENT, moved direction in event of failure to a footnote, added checkbox for SWABBED to Section A, added Continuing Actions options to Section E, Clarified direction to PM at very bottom.
25-Jul-2017	3.0	Section C: added note chlorine increase is a FAIL. Section C: added checkbox for Copper. Table: added asterisks on 2 headers and a footnote about copper.
08-Sep-2017	3.1	Adjusted form title and edited grey note above Section A. Added "/Assistant" for contractor use in Sections A,B,C and shaded OWWCO# column. Adjusted recipients in highlighted directions at bottom of Page 1.
14-Feb-2018	4.0	Added flushing velocity or 3 volumes to Section A. Added post-flush turbidity limit to Section A. Added signature for approval to connect to system in Section E. Mandated use of digital chlorine test equipment.
10-Oct-2018	5.0	Added note regarding water meter reading requirements (continuous readings – cannot reset), clarified note on post-flush turbidity limit, updated formatting to chlorine residuals table on page 2 and added Disinfection Contractor as recipient of scanned FORM once completed.
24-Dec-2018	5.1	Updated footer and changed titled to document history section.
01-Dec-2020	6.0	Staff Suggestion 2020-74. Updated for Watermain Disinfection Procedure v2.0 (August 2020). Changed section # in table footnote. Added note that WQA may perform sampling and testing. Updated ZZG e-mail address for records and changed Maxxam to BV Labs.
06-May-2021	6.0	Administrative update performed by QA Team to reflect the new numbering convention. Document numbering has been updated for all QA controlled documents reflected within the Water Master List.
26-May-2021	6.1	Updated date format from dd/mm/yy to yy/mm/dd to align with Chain of Custody. Staff Suggestion 2021-41.
18-Jan-22	6.2	Revision date and number updates as per the 2021 DWQMS Internal Audit Finding (NCAP finding 2021-03) and WWIMS Internal Audit Finding (CI-2021-30)
04-Feb-2022	7.0	Updates to Section A (Initial Flushing) as per Ministry Inspection BMP finding: Removed chlorine residual monitoring of source water, moved Swabbing field to above Section A as it occurs prior to initial flushing and added time stamp for turbidity monitoring. Added BFP Test Report requirement. Staff Suggestion #2021-119.
29-Apr-2025	8.0	Updates to Page 2, Chlorine Decrease Calculation, added instruction for Operators to not use decimal places and round up and round down to the whole number on percentages. Staff Suggestion #2024-134, clarified wording, updated flow/submission of completed form.