Office of Drinking Water – Disinfection Requirements PUBLIC WATER SYSTEMS (15 or more service connections)

Updated: May 2025

Contact Information: The approval and permit process can be found online through the official website of the Office of Drinking Water for the Manitoba Government. For more information, email: drinkingwater.approvals@gov.mb.ca

Note: This table is intended for smaller Public Water Systems (PWS) regulated by the Office of Drinking Water for the Manitoba Government. Systems with a peak population more than 500 people may have additional disinfection requirements. Alternative disinfection and filtration options, 3-log and 4-log requirements and questions should be directed to the Office of Drinking Water's Approvals Unit. Disinfection and turbidity monitoring requirements must be discussed with the Drinking Water Officer.

# of Connections	Population Type	Source Water Type	Primary Disinfection	Secondary Disinfection	Filtration
15 or more Service Connections	Not Applicable.	Surface Water/ High Risk GUDI	20 minutes of <i>effective</i> chlorine contact time. AND Ultraviolet (UV) ¹ disinfection.	Yes.	Yes, 1-micron absolute filter. OR Filtration options meeting 3-log requirements.
	Not Applicable.	GUDI	20 minutes of <i>effective</i> chlorine contact time. AND Ultraviolet (UV) ¹ disinfection.	Yes.	Optional.
	Year-round (< 100) OR Seasonal (< 500)	Secure Groundwater	20 minutes of <u>hydraulic</u> chlorine contact time. OR Ultraviolet (UV) disinfection.	Yes.	Not Required.
	Year-round (≥ 100) OR Seasonal (≥ 500)	Secure Groundwater	20 minutes of <u>effective</u> chlorine contact time. OR Ultraviolet (UV) disinfection.	Yes.	Not Required.

- 1) The requirement for UV disinfection for Surface Water and GUDI systems can be waived if filtration meets 3-log requirements; questions should be directed to the Office of Drinking Water's Approvals Unit.
- 2) Secondary disinfection can be free chlorine residuals or mono-chloramination; both methods are accepted by the Office of Drinking Water.
- 3) 20 minutes of effective chlorine contact time means a baffle factor will be applied to the chlorine contact time calculations; hydraulic chlorine contact time means that no baffle factor will be applied.
- 4) Ultraviolet (UV) disinfection units must meet NSF 55 Class A certification or US EPA dose validated with appropriate flow restrictors.
- 5) Pipeline chlorine contact time is not accepted by the Office of Drinking Water for new works.
- 6) Contact the Office of Drinking Water about requirements for bulk, truck, or pail fill stations.