

Checklist for commissioning a new non-potable/alternate water source system*

(such as a rainwater harvesting system)



IMPORTANT NOTE:



Start this process at least two months before intended occupancy. Before an Occupancy Permit is issued, the actions in this commissioning checklist must be completed.

- Contact the District Plumbing Inspector **at least two months** before intended occupancy.
- Apply for an Operating Permit at any building stage (vancouver.ca/operating-permit). This is an entirely on-line process and takes less than 3 minutes. Record the system status as “Inactive.”
- Conduct a cross-connection control test to CSA B128.1, “Design and Installation of Non-Potable Water Systems.” This must be witnessed by a Plumbing Inspector.
- Submit treated, non-potable water samples **weekly, for 4 weeks** to a lab[†], and report the results on-line for your Operating Permit. **These results must be reported to the City before an Occupancy Permit is issued.** Lab tests for commissioning must be conducted within 8 weeks of occupancy.

DETAILS: The four, weekly lab samples must test for *E. coli* and turbidity. In addition, only one sample for *Legionella pneumophila* is required.

Suggested testing schedule:

Sampling Week	<i>E. coli</i>	Turbidity	<i>Legionella pneumophila</i>
1	✓	✓	✓*
2	✓	✓	—
3	✓	✓	—
4	✓	✓	—

* It is advisable to take the *Legionella pneumophila* sample in the first week, as samples can take 3-4 weeks to process.

STANDARDS: Water quality tests must meet the parameters below. If there is a failure, an additional water sample must be collected no less than 48 hours after any cleaning and disinfection.

	<i>E. coli</i>	Turbidity	<i>Legionella pneumophila</i>
Standard*	Below 100 CFU (or MPN) per 100 mL	Below 10 NTU	Below 10 CFU per mL

* CFU = Colony Forming Units; MPN = Most Probable Number; NTU = Nephelometric Turbidity Units

NOTES:

* Based on Vancouver Building By-law Book II, Division B, Section 2.7.

† See vancouver.ca/operating-permit for a list of labs, sampling guidelines, and a User’s Guide for uploading lab reports to your Operating Permit.