

FALL 2021

CP UPDATE SEMINAR

City of Vancouver

Operating Permits & Building Storm Sumps

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VIA ZOOM



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Operating Permit Program (Water Systems) Overview for the CP Program

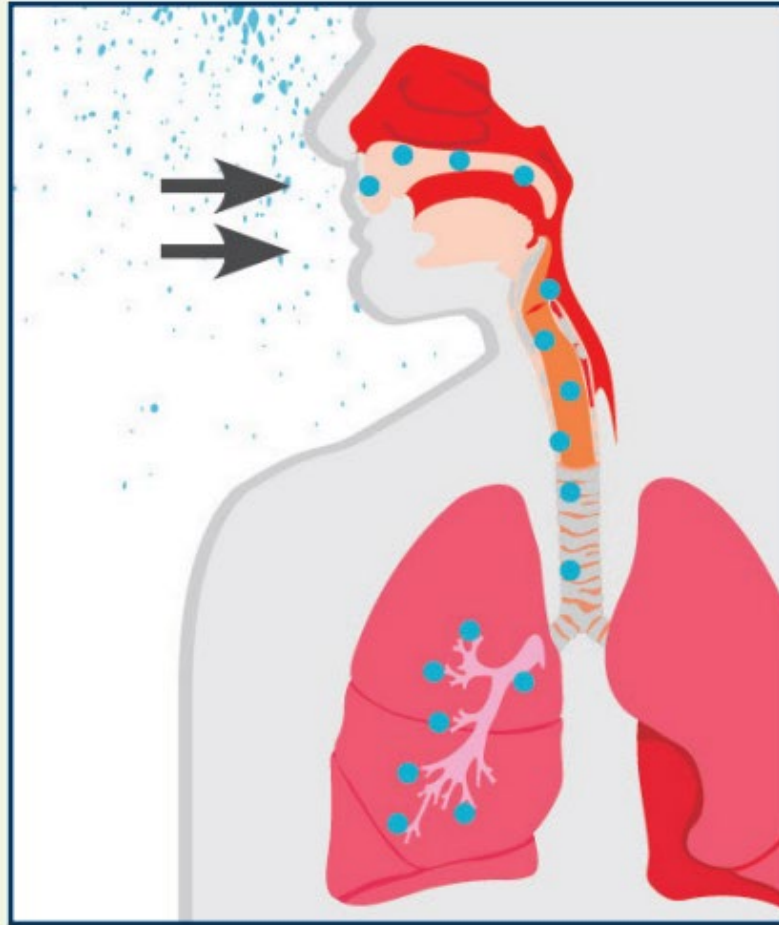
November 4, 2021

Operating Permits (Water Systems)

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vancouver.ca/operating-permit



Legionnaires' disease, a type of severe pneumonia, is caused by breathing in small droplets of water that contain *Legionella*.

The charts below show an overview of the selected disease and its geographic distribution. Choose a different disease, health region, or years from the menus on the right.

Select a Disease

Legionellosis

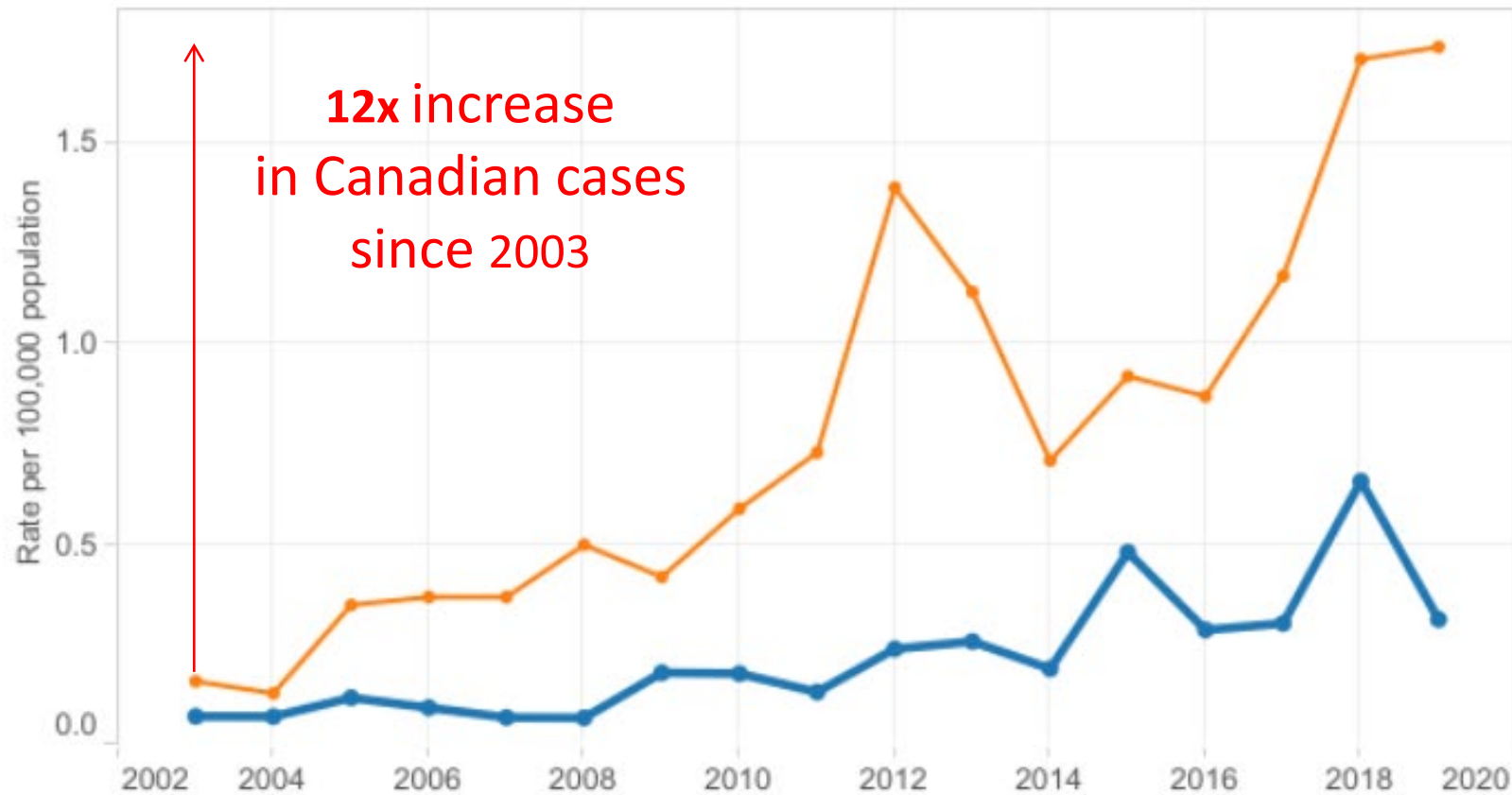
Select a Health Region

All BC

Select a Date Range

2003 2019

Legionellosis, 2003 to 2019, All BC



Legend

- Region Rate
- Canada Rate



Source: Vancouver Coastal Health



Source: City of Vancouver

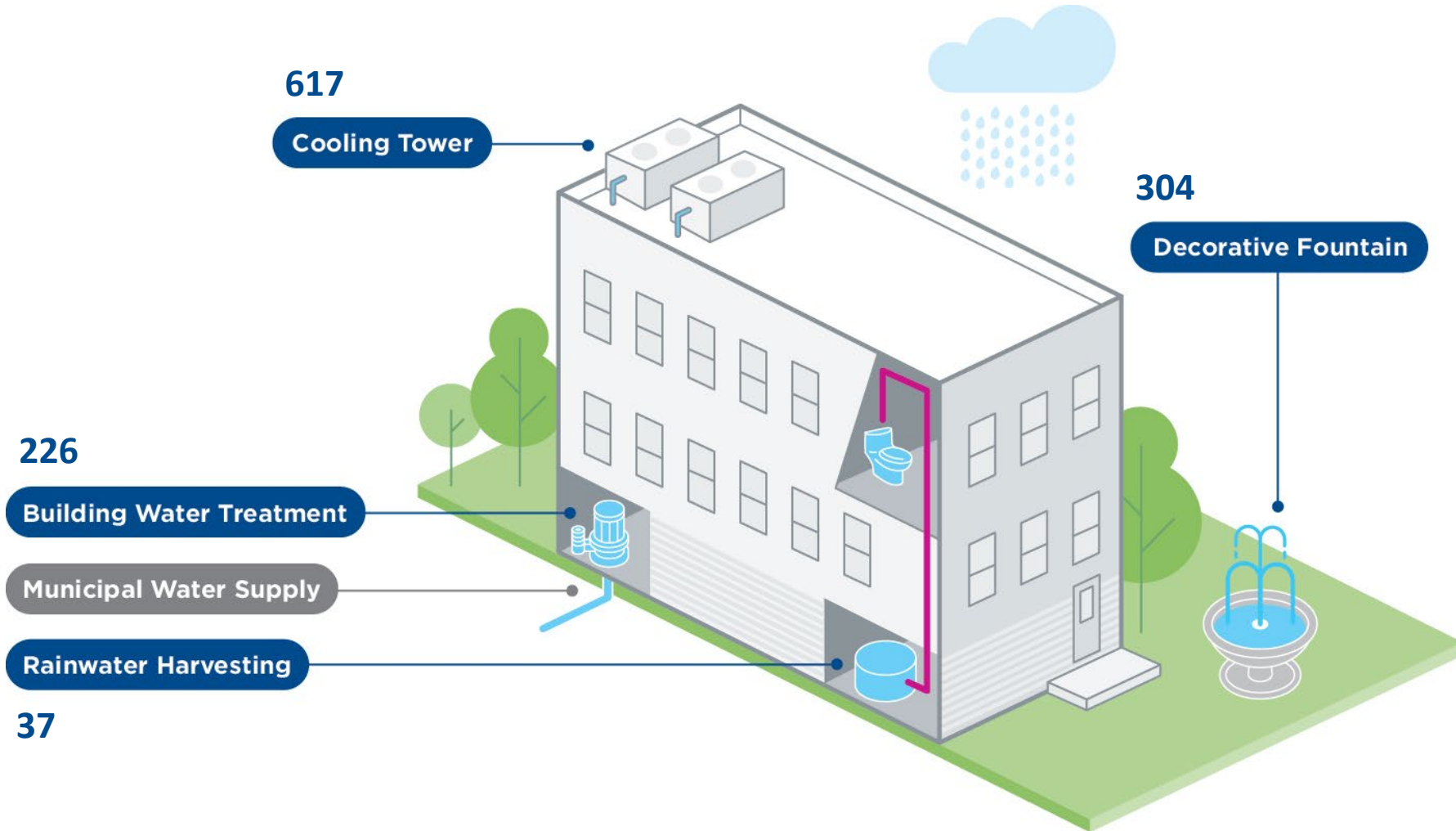


Source: City of Vancouver



Source: Google Earth

Operating Permits (Water Systems)



Current to Oct 19, 2021

Summary: Cooling Towers

Installation requirements for new cooling towers:

- Set-backs:
 - 7.6 m from outdoor air intakes,
 - 3 m from doors, operable windows and occupiable outdoor spaces,
 - 2.15 m above sidewalks and driveways.
- Drift eliminator & water treatment system.
- Access for maintenance & testing.
- 1 year maintenance contract.

For new & existing cooling towers:

- Operating Permit: vancouver.ca/operating-permit
- Monthly *Legionella* reporting (starting 2022).

VBBL Book I,
Division B,
Article 6.3.2.15.

VBBL Book II,
Division B,
Article 2.2.11.6.

Summary: Non-potable Water Systems

- Operating Permit: vancouver.ca/operating-permit
- Occupancy Permit contingent on Operating Permit & commissioning.
- Water quality reporting every 2 months.

VBBL Book II,
Division B,
Section 2.7

Summary: Decorative Water Features



- Operating Permit: vancouver.ca/operating-permit
 - Exempt: Fish ponds and natural bodies of water; systems regulated under the BC *Pool Regulation*.
 - Note: A living wall or green wall is NOT a decorative water feature.
- Advisory against human access.
- *Legionella* reporting every 2 months (starting 2022).

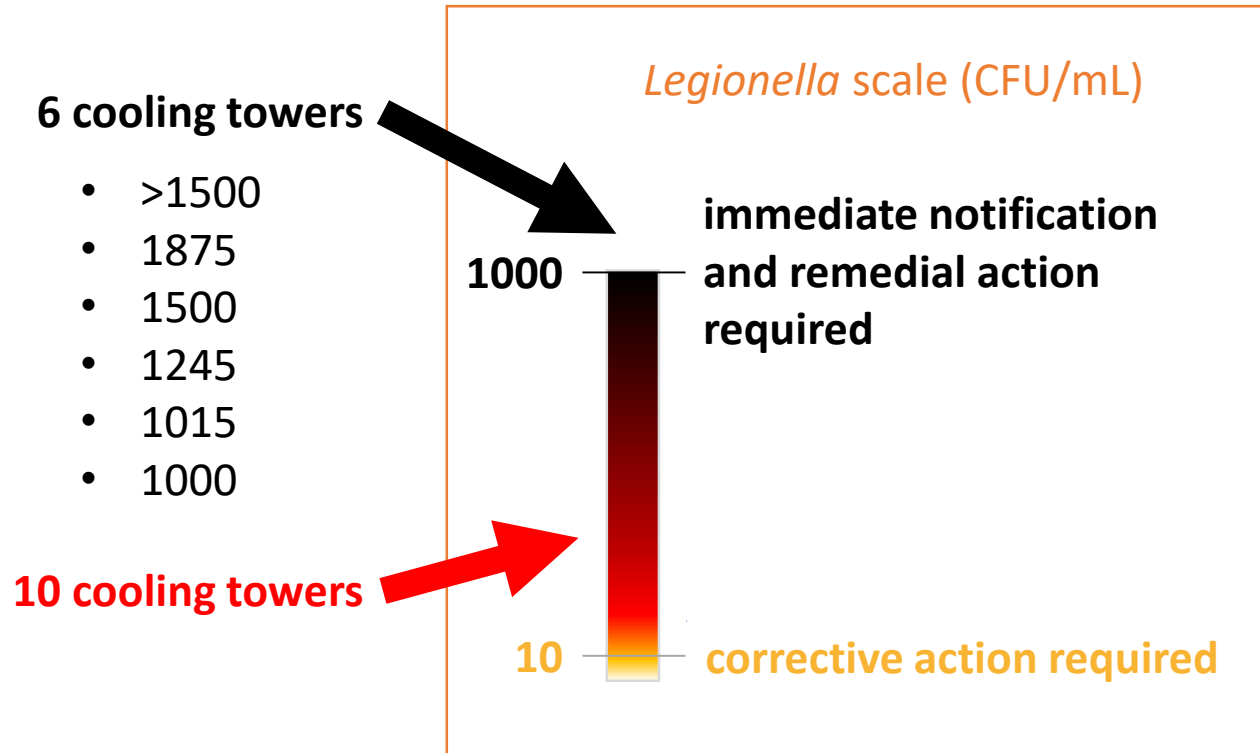
VBBL Book II,
Division B,
Article 2.2.11.7.

Summary: Potable Water Systems

- **Hot water** tanks ≥ 60 °C.
(U.S. Centers for Disease Control and Prevention recommends recirculation loops ≥ 49 °C.)
- **Showerhead** and **faucet** water efficiency measures not required for *treatment* and *care* occupancies.

VBBL Book II,
Division B,
Article 2.6.2.12.

Vancouver Legionella results



- 411 cooling towers reporting
- 617 registered cooling towers

Data current to Oct 19, 2021

Source: info.gov.hk/gia/general/202110/07/P2021100700336.htm

	Percentage of Cooling Towers in Exceedance	
2021 Cooling Tower Results	Hong Kong	City of Vancouver
> 1,000 CFU/mL	3%	2%
10 - 1,000 CFU/mL	18%	3%

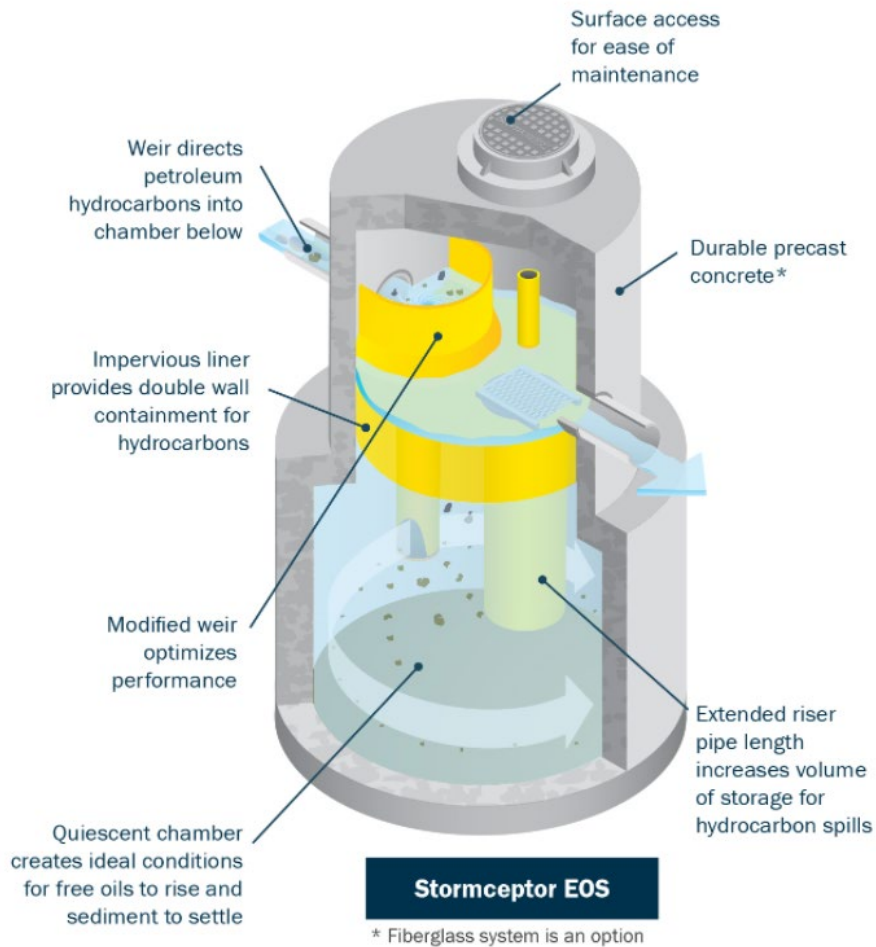
	Total (From Jan up to Sep 2021) 總數 (2021年1月至9月)
No. of water samples from fresh water cooling towers tested by EMSD (No. of buildings involved) 機電工程署檢測的淡水冷卻塔水樣本數目 (涉及的建築物數量)	581 (404)
No. of water samples with total legionella count at or above the upper threshold (i.e. 1 000 cfu/ml) with nuisance notices issued 退伍軍人桿菌總濃度等於或超過其上限值(即每毫升 1 000 菌落) 及已發出「妨擾事故通知」的水樣本數目	17
No. of water samples detected with total legionella count between 10 and 1 000 cfu/ml 退伍軍人桿菌總濃度介乎每毫升 10 菌落至每毫升 1 000 菌落之間的水樣本數目	107



Building Storm Sumps Review for the CP Program

November 4, 2021

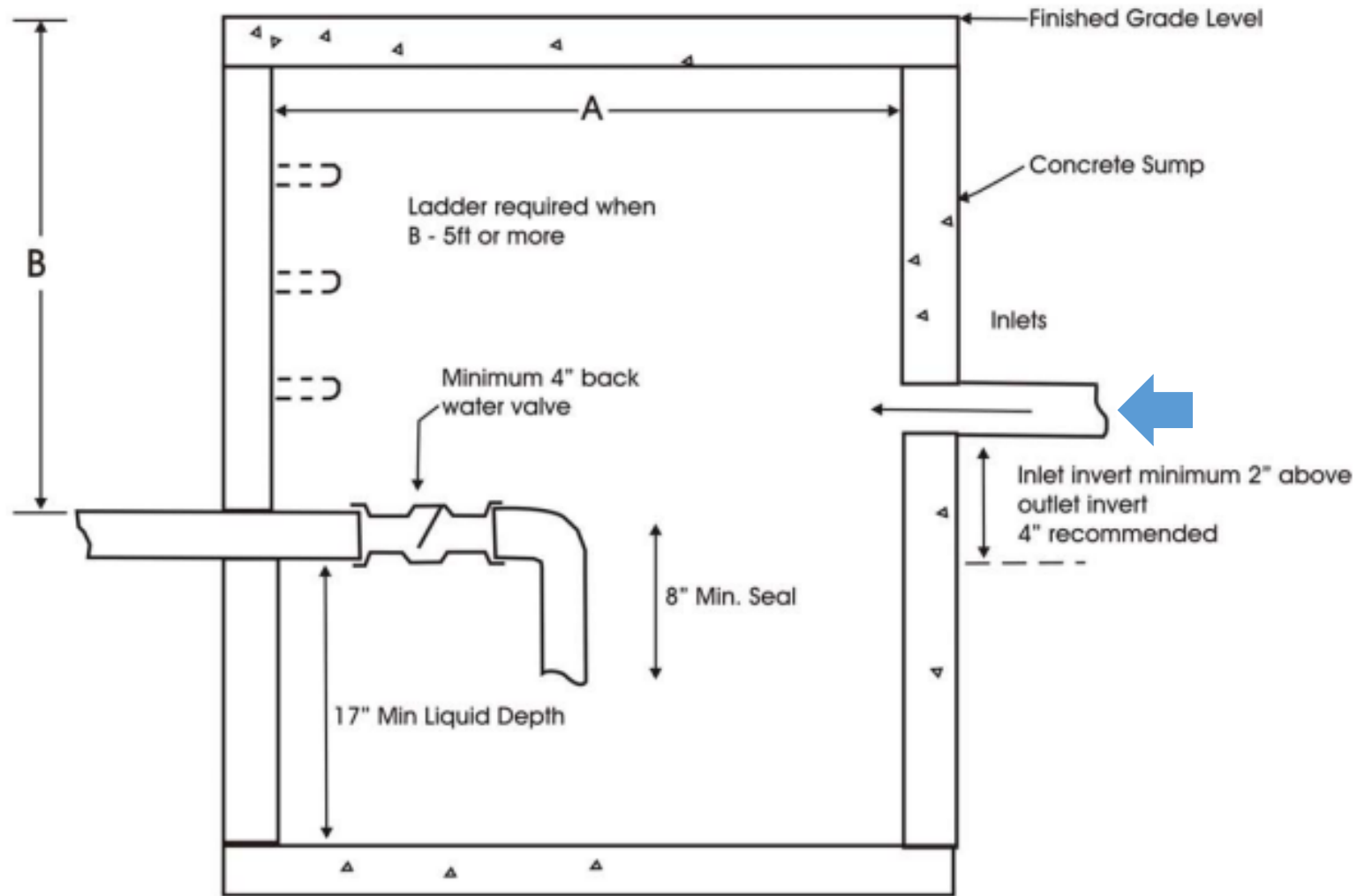
Building Storm Sump Requirement



- > Proprietary systems (Stormceptor, Jellyfish) may be installed as a rainwater management requirement.
- > These systems **do not** protect against **sewer surcharges** or **sewer gases**.
- > The City sewer system is still a **combined system** (even downtown):

A building storm sump is generally **required** downstream of the proprietary system.

Building Storm Sump Requirement



VBBL Book II, Division B,
Article 2.4.5.2.
Sumps and Traps for
Storm Drainage Systems

VBBL Book II, Division B,
Article 2.4.6.4.
Protection from Backflow