



**Installation of Water Treatment  
Devices – Protection from  
Contamination**

**No.: PLUMBING-16**  
**Date: 2016-11-15**  
**Revised: 2017-06-26**

**Purpose:**

- To inform contractors, owners and suppliers of the City requirements for water treatment installations into potable water distribution systems.

**Background:**

- August 25, 2015, the Building Code Appeal Board decision #1772 turned down the applicant's request to install a water treatment system into a potable water system based on the 2012 BC Building Code.
- The *2012 BC Building Code Book II: Plumbing Systems*, Sentence 2.6.2.1.(2) reads as "A water treatment device shall not be installed unless it can be demonstrated that the service or apparatus will not introduce substances into the potable water system that may endanger health."
- Given the increased interest to install these treatment systems, the potential risk for substances to be introduced into the drinking water that may endanger health must be considered in the specifications of the appropriate applications. Consequently, all proposals to install water treatment device applications must be accompanied by an alternative solution complying with Section 5.14 of Building Regulation Bylaw No. 7230.

**Implementation:**

- Consideration for the "Alternative Solution" application shall include not only the deviation from the *2012 BC Building Code, Book II: Plumbing Systems*, but shall also include other factors including but not limited to:
  - ✓ Seismic and environmental concerns;
  - ✓ Monitoring and tampering detection;
  - ✓ Protection of the city water supply and interface with the existing distribution system;
  - ✓ Notification of end users and record keeping;
  - ✓ Chemical storage and security;
  - ✓ Spill containment and procedures in the event of incorrect dosing, etc.

See over →

This document will be registered as a covenant in favour of the City against the property under the Land Title Act.

All "Alternative Solution" applications will require the submission of the following documents:

1. A completed Executive Summary for preliminary review prior to the submission of the report. Please refer to the following link:  
[http://www.richmond.ca/\\_\\_shared/assets/pl96223.pdf](http://www.richmond.ca/__shared/assets/pl96223.pdf)
2. A technical report from a Registered Professional with appropriate qualifications and training identifying the context of installation, performance specification of the proposed equipment, and the technical basis for the installation and means to protect the general public and end users.
3. A piping diagram of the proposed water distribution system showing the type of existing piping and equipment.
4. A letter from the owner(s) stating that all end users have been informed of the decision to introduce such chemicals into the drinking water and a sign has been posted in a conspicuous place 30 days before the date of installation. The name of the chemicals being introduced and the relevant MSDS data sheets.
5. Contact information of owner's legal representative.

Registered Professionals taking responsibility for the system design are required to submit a completed Schedule B with their permit application and a corresponding Schedule C upon the completion of the field reviews.

The requirements of this bulletin will take into effect immediately for all new permit applications.

Once accepted a Plumbing Contractor will submit 3 sets of Plumbing drawings with application for review and permit issuance.