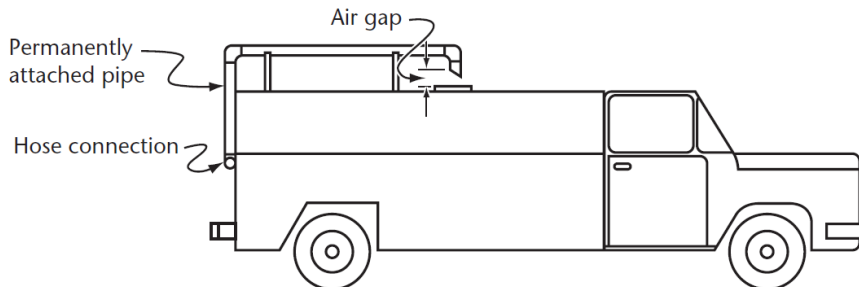


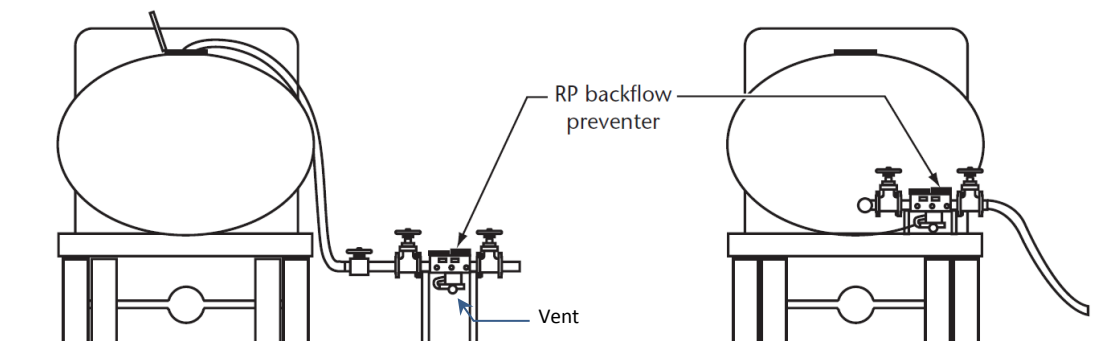
# Backflow Prevention for Water Hauling Trucks

A reduced pressure principle (RP) backflow preventer or an **air gap** must be installed on all potable water-hauling equipment.



Source: CSA (2007) B64.10-07, p55.

**Figure 1. Air gap - minimum 2 × diameter of fill pipe**



Source: CSA (2007) B64.10-07, p55.

**Figure 2. Reduced pressure (RP) mechanical backflow preventer**

Lower security backflow preventers, including single or double check valves (CV, DCV) or vacuum breakers (AVB, PVB) are not acceptable substitutes.

## How to distinguish an RP from a DCV.

Both are testable backflow preventers with 2 spring-loaded check valves, 2 shutoff ball valves and 4 test ports, same size, same materials. The RP has a reduced pressure zone in the centre that vents water if either of the check valves fail. So there should be a drain under an RP, but not under a double check.



Images: [www.wattscanada.ca](http://www.wattscanada.ca)

**Figure 3. RP (note vent at bottom)**



**Figure 4. DCV (no vent at bottom)**

**Reference:** Canadian Standards Association (CSA). 2007. *Selection and installation of backflow preventers*. Standard B64.10-07. (Current version is 2011)