

# Cross-Connection Control

## FOR INDIVIDUAL CAMPSITES AT RECREATIONAL CAMPING AREAS

To satisfy cross-connection control requirements at **individual campsites** in recreational camping areas, Minnesota Statute 144.3855 allows the use of an ASSE 1011 hose connection vacuum breaker. [Minnesota Revisor of Statutes-144.3855 \(https://www.revisor.mn.gov/statutes/?id=144.3855\)](https://www.revisor.mn.gov/statutes/?id=144.3855).

However, a device rated for continuous line pressure is more protective and installation is recommended for situations involving a direct connection to a recreational vehicle (ASSE 1012).

All hose bibbs at **individual campsites** in recreational camping areas must be protected by a backflow preventer. For installations where a Y hose connector is used to serve two independent campsites, a backflow preventer is to be installed on both threaded outlets.

If no cross-connection control device is in place at an **individual campsite**, the enforcement authority must require one. The minimum acceptable rating of the cross-connection control device is ASSE 1011. An ASSE 1052 vacuum breaker is the preferred minimum backflow prevention device, and the ASSE 1012 is recommended best practice.

MN Statutes 144.3855 does not affect cross-connection control requirements at

other locations within a recreational camping area, such as central shower buildings, laundry buildings, sanitary dump stations, etc.

The enforcing authority may not require or enforce the use of a more protective cross-connection control device than a hose connection backflow preventer at individual campsites, regardless of requirements in the Plumbing Code, or manufacturers rating.

**Note:** *Effective January 4, 2014, the federal Reduction of Lead in Drinking Water Act requires all drinking water system materials and products including plumbing pipes, fittings and fixtures introduced into commerce or for use to meet an updated "lead-free" definition. The definition was revised from not more than 8 percent to "not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures." This "lead free" requirement includes the hose connection backflow preventer installed at **individual campsites**. A "lead free" plumbing product must have displayed certification marks demonstrating compliance with the Safe Drinking Water Act lead free requirement. See [Lead free certification marks \(https://www.nsf.org/newsroom\\_pdf/Lead\\_free\\_certification\\_marks.pdf\)](https://www.nsf.org/newsroom_pdf/Lead_free_certification_marks.pdf)*

## Examples of backflow preventers for hose connections at recreational camping areas:

### ASSE Standard 1011

#### Vacuum Breaker – Hose Connection (Minimum device)

- Not field testable
- Minimum requirement for all RV connection sites
- Can be used for backsiphonage applications
- Not rated for continuous pressure
- Can manually winterize



### ASSE Standard 1052

#### Vacuum Breaker – Hose Connection (Preferred minimum device)

- Field testable
- Can be used for low or high hazard applications
- Can be used for backsiphonage and low head (10 feet) backpressure applications
- Not rated for continuous pressure
- Can manually winterize



### ASSE Standard 1012

#### Dual Check Valve with Intermediate Atmospheric Vent (DCVIAV) (Recommended device)

- Not field testable
- In-line connection
- To be used for low hazard application with small pipe sizes
- Protects against backpressure or backsiphonage
- Can be used under continuous pressure
- Can manually winterize



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