

Key Changes to
Ohio Administrative Code
3701-28-08
“Requirements for all private water
systems”

Ohio Department of Health



Key Changes in 08

- OAC 3701-28-08 is a combination of the following 2000 private water systems rules:
 - OAC 3701-28-08
 - “Cross-connection and backflow.”
 - OAC 3701-28-11
 - “Miscellaneous provisions for the construction of private water systems, sampling faucets and distribution water service lines.”
 - OAC 3701-28-16
 - “Piping.”
 - OAC 3701-28-19
 - “Orders to improve water systems.”

Key Changes in 08

- Piping and Fittings
 - Outside and Inside the foundation
- Sample tap
- Backflow prevention
 - Cross connections
 - Service connections
 - Yard hydrants
- Pits

Piping and Pipe Fittings

- Rule (C)
 - Addition of requirements inside the foundation of a house or building;
 - The old rule only emphasized the piping outside the building
 - This will allow for us to dictate the pipe and pipe fittings inside the foundation to the pressure tank or where the pipe enters the foundation, if no pressure tank is installed.

Piping and Pipe Fittings

- Rule (E)
 - No reference to the Ohio Plumbing Code
 - Established tables, based off of the tables in the Ohio Plumbing Code
 - Table 1: Water Service Pipe (Outside Use)
 - Table 2: Water Distribution Pipe (Inside Use)
 - Table 3: Pipe Fittings

Sampling Faucet

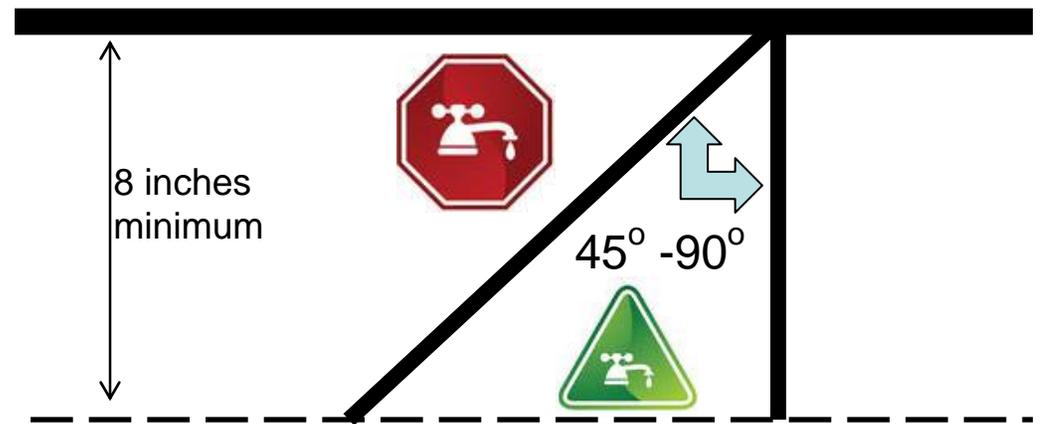
- (F)(1) Location
 - At pressure tank;
 - On well side of pressure tank;
 - extended from the pressure tank to an accessible location outside the foundation walls;
 - first accessible location inside the foundation;
- (F)(2)
 - Added the words “an additional” to emphasize that this sampling faucet is in addition to the one required in (F)(1);

Sampling Faucet

- (F)(3) Accessibility
 - Easily accessible
 - Not in confined spaces or crawl spaces, unless
 - Pressure tank and sample port are within 3 ft of crawl space entrance, or
 - Reasonable walking access for an average size adult

Sampling Faucet

- (F)(5) Spigot Discharge
 - Not less than 45 degrees from horizontal
 - Between 45-90 degrees - acceptable



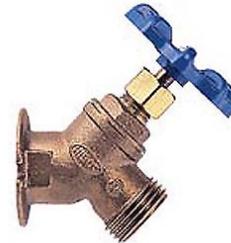
Sampling Faucet

- (F)(6) – Smooth-nosed (non-threaded)

– This



not



Sampling Faucet

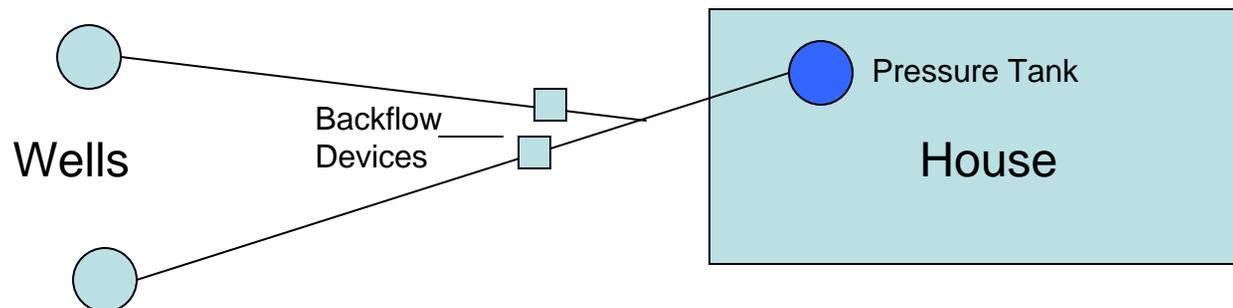
- (F)(7) – No attached backflow devices



- (F)(8) – Placed prior to backflow devices

Cross Connections

- Separated public and private cross connections
 - No cross connection with public allowed
 - Private cross connection require backflow devices prior to the connection for each system
 - Sample tap required before each backflow device



Backflow Prevention and Cross connection definitions

- Rule (B)
 - (1)(a) dual check valves meeting
 - ASSE 1024, 1013 and 1015 or an air gap
 - Definitions of dual check valves and air gap
 - (2) Cross connection
 - (3) Yard hydrant and weep hole

Backflow prevention

- (K) – ASSE 1013, 1015, or 1024
– ASSE 1024



Backflow prevention

- (K) – ASSE 1013, 1015, or 1024

– ASSE 1015



– ASSE 1013



Backflow prevention

- (L) – All service connections must have a backflow prevention device
 - The device shall be easily accessible within
 - A Vault
 - Equipment storage pit
 - The foundation

Backflow Prevention

- (M) – Exception to use of ASSE 1013 and 1015 when more than 1 service connection
 - Single Family dwellings
 - PWS serving two dwellings on same or adjacent properties
- Also requires additional service connection branches to have backflow prevention installed immediately after each branch connection

Yard hydrants

- (N) Service connections with a yard hydrant meeting ASSE 1057
 - Does Not require a backflow device prior to hydrant;
 - But, may be required to have ASSE 1024 on hose bibb to prevent backflow or backsiphonage
 - All other yard hydrants must have a backflow device installed in the service line prior to the yard hydrant

ASSE 1057 Sanitary Hydrant



Backflow prevention

- (P) – Protect the source by requiring a device prior to a non pressurized reservoir tank

Pits

- (Q) Altering a well in a pit, where pit is not being used to house equipment
 - Casing must be extended a minimum of 12 inches above natural ground level or top of pit wall whichever is higher;
 - All other components must be removed
 - One wall must be collapsed, floor broken, and drains removed
 - 6 inch bentonite layer on bottom around base of well casing prior to placement of fill materials
 - Fill materials must be clay-based soils

Pits

- (R) Altering a well in a pit, where pit is being used to house equipment
 - Casing must be extended a minimum of 12 inches above natural ground level or top of pit wall whichever is higher;
 - Construct wall between well casing and equipment
 - Sufficient strength and watertight
 - Wall must be at least 12 inches from outer portion of casing
 - 6 inch bentonite layer on bottom around base of well casing prior to placement of fill materials
 - Fill materials must be clay-based soils

Pits

- (S) Constructing or Altering a private water system with a pit for equipment storage
 - Shall add a drain with backflow protection
 - If no drain exists then a backflow prevention device must be installed where the water line enters the pit.