

Cross Connection Hazards

Building water supply line (newer building) DC @ water meter

I find these at newer buildings, latest construction standards/IPC

Building water supply @ mechanical room DC (sometimes if under 2 story)

Some buildings have DCs on domestic supply line in mechanical rooms

Building water supply @ mechanical room DC (must have if over 2 story)

These are always in mech room at pumps

Animal Services must have RP on supply line

Medical Facilities must have RP on supply line

Aquariums/Fish tanks must have RP

Automatic Developers- x-ray developing, print shop equipment, Photo Processing Equipment must have an RP (older non-digital)

Anything digital uses no water. All others have water supply for rinse

Automotive applications- tire washers, parts washers, paint shops

Boiler/corrosion control must have RP

Car Wash must have RP

Carbonator/fountain drink machine must have RP

Any chemical feeder with direct connection to potable water line needs RP

Chill water/Condenser/Cooling Towers RP or AG

Clean in place system/Rinse Sink RP (any vat, tank, vessel with direct connection used for cleaning anything)

Computers RP any lever units/liebert units, any water used for cooling computer banks or battery banks

De-Ionized water, water treatment systems RP

Dishwashers - commercial, Kitchen equipment - commercial, Steam systems/ Rinse Sink (cleaning) RP

Fertilizer Injectors RP

Fire Sprinkler Systems DC older buildings may only have single checks, these are non testable devices. Most DC's are in vaults at edge of property. Ones in vaults also have 3/4" bypass- some in vault, most in meter box next to vault. Newer bldgs have them in riser rooms in vertical riser pipe e.g.(new bldg at north police station)

Hose bib's - per city code, all faucets are to have anti-siphon devices installed on them

Hot tub RP

Ice Makers - some older models are plumbed where backflow can occur. Newer ones are plumbed to the top with built in air gap, not requiring any backflow protection

Irrigation - DC on all sprinkler systems, AVB on older systems, RP if using any injection (fertilizers) or anti-freeze

Janitors' closets/Mop Sinks- RP - many older closets were constructed in a way that could allow a backflow/back-siphonage situation to happen. Long hoses left lying in sinks or tub. Used to fill floor machines with cleaning chemicals in them. (Look at one at city hall)

Make up water lines-RP- again, any physical connection to any gas liquid or solid that if a reversal of flow happened, this stuff would contaminate the potable water, either the building lines or the main lines.

Make up tanks/storage tanks containing toxic substances (direct connection) -RP- any tanks used to store water for any application e.g. tank on roof for backup fire fighting (gravity flow)

Ornamental Fountains/Ponds -RP- must have air gap on supply line or RP if end of line is submerged in pond/fountain

Water Well - air gap

Re-Circulated water - RP e.g. heat exchange system at city hall. No water may be returned to plumbing. RP on direct connection

Solar Systems - RP

Swim Pools - pool equipment room. Supply line is direct connection, must have backflow assembly. If just adding water with hose, only anti-siphon on hose bib applies (no hose end actually submerged in pool water. No hose end allowed to be left submerged in any vessel!!

Water Treatment, Softening, Filtering -RP- applications vary Simple inline filter on supply line to coffee machine-not required. DI systems require RP