

## Above-Ground isolation valves of the on-site fire hydrant system where the supply of water is taken from the town main

It has been recognised lever handles, if installed as part of the above-ground isolation valves of an on-site fire hydrant system, can close the valve very quickly and may cause water hammer within the town mains and the internal fire hydrant system. The lever handle may be fitted incorrectly resulting in the valve being locked in the closed position when it indicates/appears to be locked in the fully open position. Other valves have been known to have issues with the internal rubber seal which may become dislodged. The rubber seal could wedge in a fire pump strainer or the hose line that a firefighter is using to fight a fire. This may place the firefighters at risk. Queensland Fire and Rescue (QFR) has consulted the Queensland Hydraulics' Association, the Plumbing Industry Consultative Group and Urban Utilities regarding this issue.

At the time of inspection, above-ground isolation valves of the fire hydrant system must be as per AS 2419.1:2021, section 9.3.2.1:

- full-flow outside screw and yoke wheel gate of the indicating type conforming to AS/NZS 2638.1 or AS/NZS 2638.2;
- low torque wheel-operated multi turn post indicator ball; or
- gear operated butterfly valve with all metal actuating mechanisms.

At inspection, QFR will not accept 'lever-handle' type isolation valves on the above-ground on-site fire hydrant system side of the water supply.

These requirements do not apply to the network utility operator's valve set. The on-site fire hydrant system commences downstream of the water agency meter and valves, regardless of the location of the connection of the network utility operator's pipework to the on-site fire hydrant system pipework (that is, whether the connection is on the property boundary or within the property boundary). This determination is supported by AS 2419.1:2021, Clause 4.3.1.1.