

Water quality requirements for firefighting purposes

The following sources of water are those considered suitable for firefighting via hydrants, hose reels or sprinklers in and around buildings as referenced in AS 2419.1:2021, clause 4.1.3.

Potable water source:

- Local Authority reticulated supply is acceptable for firefighting.

Non-potable water sources:

- Recycled Class A+ Water – Wastewater that has been highly treated to the appropriate standard and is suitable to use in firefighting.
To ensure the consistent production and the suitable management of Class A+ water for use in firefighting, recycled water treatment plants are required to prepare and use a Recycled Water Management Plan as described in the Queensland Water Recycling Guidelines to ensure the water treatment plant is designed, operated and maintained to meet the consistent production of Class A+ water to minimise health risks to firefighters.

Note: All other forms of wastewater and recycled water must not be used for firefighting.

- Swimming pools - Water from swimming pools that are in normal use should be regarded as generally suitable for firefighting except where swimming pools are obviously neglected or where other indications of contamination are suspected.
- Rainwater tanks - Sprinklers and rising main systems should be regarded as generally suitable for firefighting unless contamination is known or suspected.

Queensland Fire and Rescue directives inform operational crews not to consider the following water sources acceptable:

- Major water supply reservoirs - Dams and farm dams should be generally regarded as not suitable for firefighting especially where there are obvious signs of pollution or warning notifications have been published by government or health authorities. These supplies can be weather dependent and perhaps unreliable.
- Water in retention ponds - Retention of wastewater from premises (e.g. tanneries, wool scours, power houses and other industrial premises) must not be used for firefighting.

Note: QDC, MP3.7 allows water to be sourced from a dam, reservoir, river, lake, bore or sea but states the adequacy and quality of the water supply must be in accordance with clauses 4.1.2 and 4.1.3.1 of AS 2419.1:2021.

Uncontrolled runoff into these water sources makes them a health risk for firefighters when the water is sprayed during firefighting operations.