pure water storage ltd

FLUID CATEGORIES

In UK water regulations, **Fluid Categories** describe the contamination risk if water from an installation were to flow backwards into the wholesome mains supply. They run from **Category 1**, which is safe wholesome water, to **Category 5**, which is the highest risk. The category determines the level of backflow protection needed.

FLUID CATEGORY 1

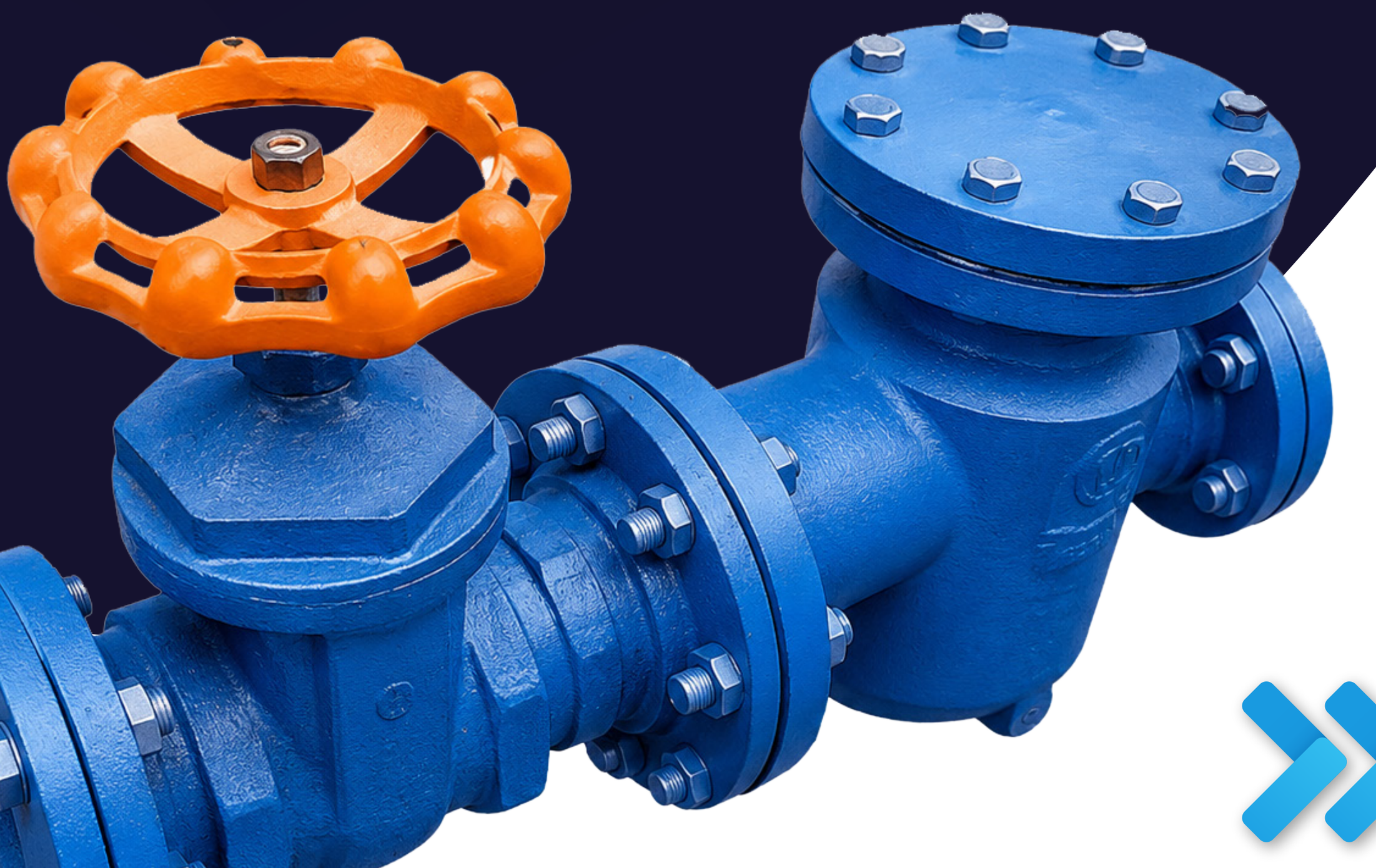
Wholesome mains water supplied by the water undertaker.

Typical Examples

Incoming mains water.

Usual Protection Principle

No special backflow protection beyond correct installation.



FLUID CATEGORY 2

Water whose appearance, taste, smell, or temperature has changed, but with no health risk.

Typical Examples

Hot water, chilled water, softened water, wholesome water in storage.

Usual Protection Principle

Usually single check valve or equivalent, where required.

FLUID CATEGORY 3

Slight health hazard because of low-toxicity substances. Including any fluid that contains Ethanol Glycol, Copper Sulphate or similar chemical additives, or Sodium Hypochlorite (Chloroses & common disinfectants)

Typical Examples

Water with low-concentration additives, some heating circuits depending on treatment.

Usual Protection Principle

Usually double check valve or equivalent.

FLUID CATEGORY 4

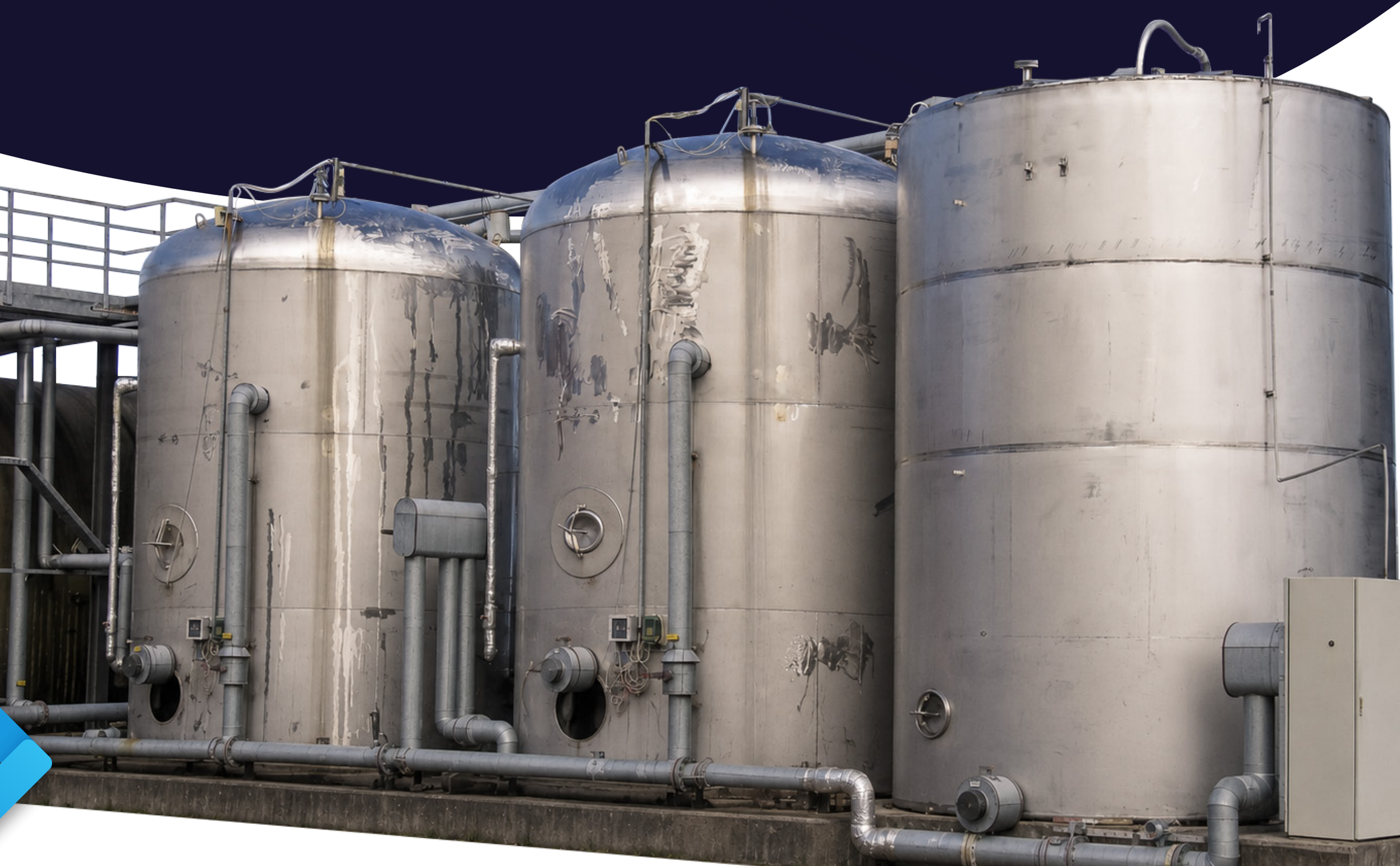
Significant health hazard because of toxic substances.

Typical Examples

Water with chemicals, cleaning agents, pesticides, corrosion inhibitors, some industrial/process systems.

Usual Protection Principle

Higher-grade protection, commonly RPZ valve or suitable air gap.



FLUID CATEGORY 5

Serious health hazard because of pathogenic organisms, radioactive substances, or very toxic substances.

Typical Examples

WC pans, urinals, bidets, sewage/process waste, animal drinking troughs, healthcare contamination risks.

Usual Protection Principle

Physical separation, usually a suitable air gap or break tank arrangement.