

## Filter Facts #5

### *Why use membrane filtration in place of conventional clarifiers for water re-use?*

Conventional processing of water containing solids and particulate matter relies upon continuous use of chemicals as flocculants and/or coagulants to form larger particle groupings, which in turn are skimmed off, or settle to the bottom of a vessel for removal.

The output of these systems often require continual monitoring by a plant operator who can test and make operational adjustments to maintain filtrate quality.

Using membrane systems, the filtrate output remains a consistent quality and does not rely upon using chemicals to either flocculate or coagulate particles. The operating parameters are easily measured by conventional process instrumentation and controlled either manually or automatically by a simple automation system.

There are a range of membrane types available in the market today. The choice of construction type, construction material and pore size will be decided by a combination of criteria which include:

- the required final use of the filtrate
- the solids and particulate loading of the raw feed
- the chemical and temperature characteristics of the raw feed