

## Water Treatment

### Trade Waste Guideline No. 41

#### INTRODUCTION

Trade waste discharges from companies conducting Water Treatment have the potential to adversely affect the sewerage system. Waste waters may contain organic matter, suspended solids, metals, acids and alkalis. Appropriate management practices at each site are necessary.

For the purpose of this Guideline 'Water Treatment' refers to the treatment of any type of water including mains, bore, surface or industrial process water, which may include, but is not restricted to the following units:

- Softeners
- Deionisers
- Reverse Osmosis
- Flocculation/Sedimentation
- Filtration
- Distillation
- Disinfection

#### KEY TRADE WASTE QUALITY REQUIREMENTS

PARAMETER	GENERALLY ACCEPTED LEVEL
Total Dissolved Solids	Dependant on the impact at receiving wastewater treatment plant
Chlorine	<5 mg/L
pH	Between 6-10 units
Suspended Solids	<500 mg/L
Temperature	<38°C
Flow rate to sewer	Dependant on capacity of receiving sewer

*Note: Discharge limits may be varied under certain circumstances for individual dischargers.*

#### TYPICAL PRETREATMENT

- Waste waters containing suspended solids discharge to sewer via a 225mm silt trap or channel fitted with screens and an appropriately sized settling pit.
- Where the pH of waste waters is likely to be outside SA Water limits, an automatic pH adjustment system and safety shut off valve are installed. In cases where alternating acid and alkali batches are generated (e.g. mixed bed deionisers), waste waters discharge to a buffering tank for co-neutralisation prior to final adjustment by the pH correction system. The tank is capable of containing the combined batch volumes of acids and alkalis.
- Where heavy metal concentrations in waste waters exceed [SA Water's Standards of Acceptance](#) an approved metal precipitation and removal system is installed before discharging to sewer.
- Waste waters, process liquors and sludges not permitted to be discharged to the sewer are contained in approved containers and/or blind tanks and disposed of by a licensed liquid waste contractor in accordance with [Trade Waste Blind Tank Guideline No. 3](#).
- All tanks and containers storing process liquors, waste waters, pre-treatment equipment and chemical solutions stored on site are banded in accordance with [Trade Waste Bunding Guideline No. 4](#).

#### ADDITIONAL INFORMATION

Mains Water Protection (AS/NZS 3500 – 2003 Part 1), [Trade Waste General Policy](#),

Revised January 2011