

## Cooling Water Discharge

### Trade Waste Guideline No. 16

#### INTRODUCTION

Trade waste discharges from companies with cooling water discharges have the potential to adversely affect the sewerage system. Discharges can contain high levels of suspended solids, organic matter, biocides and heavy metals. Appropriate management practices at each site are therefore necessary.

For the purpose of this Guideline 'cooling water' refers to any fluid emanating from single pass cooling devices, contained waters used in evaporative cooling systems, cooling towers and closed-loop cooling circuits.

#### KEY TRADE WASTE QUALITY REQUIREMENTS

PARAMETER	GENERALLY ACCEPTED LEVEL
Suspended Solids	<500 mg/L
Total Dissolved Solids	<2000mg/L
pH	Between 6-10 units
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

- Where waste waters arising from cooling water installations contain contaminants exceeding [SA Water's Standards of Acceptance of Liquid Wastes to Sewer](#), appropriate pre-treatment is installed prior to discharge to sewer. Pre-treatment may include pH correction, metal precipitation and suspended solids removal.
- Waste water from de-scaling operations is treated to remove gross solids. Further pre-treatment may be required prior to discharge to sewer.
- Waste waters not permitted to be discharged to sewer are held in an approved container or tank prior to disposal, by a licensed liquid waste contractor, in accordance with [Trade Waste Blind Tank Guideline No. 3](#).
- Containers of corrosion inhibitors, biocides and other chemical solutions are stored in a bunded compound, in accordance with [Trade Waste Bunding Guideline No. 4](#).
- Alternative chemicals are used in place of chromate/zinc scale and corrosion inhibitors.

#### ADDITIONAL INFORMATION

Mains Water Protection (AS/NZS3500 – 2003 Part 1), [Trade Waste General Policy](#),

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Further information  
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