

Cardboard Processing Trade Waste Guideline No. 42

INTRODUCTION

Trade waste discharges from Cardboard processing companies have the potential to adversely affect the sewerage system. Waste waters can contain suspended solids, inks, starch, formaldehyde, acids and alkalis. In addition, flow rates, discharge volumes and temperature can also exceed acceptance limits. For the purpose of this Guideline, 'cardboard processing' means the production of containers and other products from paper or card stock. It does not pertain to the production of paper or card from wood fibres or other raw materials.

KEY TRADE WASTE QUALITY REQUIREMENTS

PARAMETER	GENERALLY ACCEPTED LEVEL
Suspended Solids	<500 mg/L average
Total Dissolved Solids	<1500mg/L
pH	Between 6-10 units
Temperature	<38°C
Heavy Metals (Cu, Cr, Co, Pb, Zn)	See Standards of Acceptance
Flow rate to sewer	Dependant on capacity of receiving sewers

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

BEST PRACTICE MANAGEMENT ASPECTS

- Processing areas and floors are dry cleaned/swept before wash down to remove solids.
- Unused inks recovered after each 'run' for reuse.
- Starch is reused or smaller batches prepared to eliminate wastage.

MINIMUM PRETREATMENT

- Waste waters containing **organic solvents** are not discharged to the sewer without the expressed permission from the Trade Wastes Branch.
- Where the **acidity/alkalinity** of waste waters is likely to be outside the limits, automatic pH adjustment and a safety shut-off valve is installed.
- If waste waters and process liquors contain **suspended solids**, they are discharged to the sewer via a 225mm silt trap or channel fitted with screens and a settling pit.
- Where waste waters are **coloured**, a pre-treatment system is installed to reduce the colour of waste water discharges to a level acceptable to the Trade Wastes Unit.
- Where **heavy metal** concentrations in waste waters exceed [SA Water's Standards of Acceptance](#) an approved metal precipitation and removal system is installed before discharge 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 for removal 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 and chemical solutions, are banded in accordance with [Trade Waste Bunding Guideline No. 4](#).

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ADDITIONAL PRETREATMENT

- Additional screening to remove particulate matter
- Effluent equalisation to overcome extremes of pH, temperature and flow
- Additional equipment to remove grease/oil, solids or foam from the waste stream.
- Chemical addition to crack emulsions or otherwise aid in the removal of contaminants.

ADDITIONAL INFORMATION

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

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Further information

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