

Tanneries

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Trade waste discharges from companies performing tanning activities could harm the sewerage system. These can contain high levels of suspended solids, biochemical oxygen demand (BOD), oils/grease, process chemical residues and fluctuating pH levels.

For the purpose of this Guideline, 'tanning' refers to the chemical and physical process by which animal skins and hides are made suitable for human use. This Guideline applies to all tanning operations.

Key trade waste quality requirements

Parameter	Generally accepted level
Suspended solids	≤500 mg/L
Grease/oil	≤100 mg/L
Biological oxygen demand	≤1000 mg/L
Total dissolved solids	≤1500 mg/L
рН	Between 6-10 units
Temperature	≤38 degrees C
Sulphide	≤5 mg/L
Hexavalent chromium / total chromium	≤10 mg/L / ≤20 mg/L
Ammonia	≤50 mg/L
Flow rate to sewer	Dependant on capacity of receiving sewer

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

Best practice management

- Waste minimisation measures and practices are in place to reduce used water loadings on the sewerage system, e.g. process green hides/skins in preference to salted stock.
- Waste streams segregated for recycling and/or individual treatment, e.g. chromium liquor.
- Work areas dry cleaned/swept to remove coarse solids before wash down.
- All used water prevented from entering the stormwater system.



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Typical pre-treatment

- Pre-treatment plant incorporates equipment for:
 - o screening
 - o grease /oil and suspended solids removal
 - pH correction
 - sulphide oxidation (if applicable)
 - o heavy metal removal (if applicable)
 - \circ flow equalisation and
 - o solids/ sludge dewatering.
- The operator maintains records that substantiate the correct disposal of spent chemicals and solid wastes produced on site.
- All chemical/ solvent storage areas, process and waste tanks are bunded in accordance with the <u>Bunding and Blind Tanks Guideline</u>.
- Where the treatment of sulphide wastewaters is undertaken in accordance with the <u>Batch Treatment Guideline</u>:
 - Each batch is tested for sulphide levels prior to discharge to equalisation tank.
 - A log indicating batch number, time, date, volume and detected final sulphide level is kept and made available to our Trade Waste team.
- Treatment to reduce ammonia to an acceptable level for discharge may be necessary.
- Dye solutions should be totally recycled in a closed loop system. Discharge of dye contaminants is only acceptable from product rinsing steps.

More information

Mains water protection (AS/NZS 3500)

Backflow Prevention Requirements - Office of the Technical Regulator

Restricted Wastewater Acceptance Standards

