

6. COMMERCIAL LAUNDRY & DRY CLEANING WASTE

Preface

Liquid waste generated by industry, small business and commercial enterprises is referred to as trade waste. The Water Supply (Safety & Reliability) Act 2008 prohibits the unauthorised discharge of wastes, other than domestic sewage, into the sewerage system.

1. The definition of trade waste is;
 - *The waterborne waste from business, trade or manufacturing property, other than:*
 - *Waste that is a prohibited substance; or*
 - *Human waste; or*
 - *Stormwater.*
2. The definition of Domestic waste is;
 - *Faecal matter and urine of human origin and liquid household wastes from water closet pans, sinks, baths, basins and similar fixtures designed for use in private dwellings*

General

Chemicals proposed for use in boilers must be stated in the trade waste application. Some chemicals may be unacceptable for discharge to sewer and the customer may need to use a substitute. Discharge requirements for Cooling Towers/Boiler Blowdown units are contained in *Trade waste information sheet 11: cooling towers/boiler blowdown*.

Pre-treatment requirements

Lint screens are to be provided (washing machine internal screens are acceptable).

A cooling pit is to be installed for the laundry wastes to pass through prior to discharge to the sewerage system. The pit must be of a capacity so as to cool the discharge to below 38°C. If the cooling pit is covered, venting should be provided to accelerate cooling. The applicant must also submit the consultant's or supplier's calculations regarding the capacity of the cooling pit.

A cooling pit may not be required if cold water only is used for washing or a device reducing the temperature of hot water is installed.

A cooling pit is required to be installed where a trade waste discharge is likely to exceed 38°C, e.g. laundry, boiler blow down, autoclave units, etc. Incoming hot waste is cooled down by mixing with cool wastewater already in the pit and retained there until the

temperature reaches the acceptable level. The size of the pit should be sufficient to allow the temperature to drop and can be determined by the following formula:

$$V = V_H + V_H \times F \quad F = (T_H - T_A) / (T_A - T_C)$$

Where,

V = the minimum volume of the pit below the water level

V_H = estimated maximum volume of hot water discharged at one time

F = the estimated factor

T_H = maximum temperature of hot water discharged into the pit

T_C = assumed temperature of cold water in the pit, say 20°C

T_A = temperature of waste allowed into the sewer, e.g. 38°C.

Containment of dry cleaning solvent tanks

Where solvent tanks are located such that a tank leakage or collapse would lead to the solvent entering the sewer, premises connected to the sewer must, irrespective of the tank capacity, provide impervious bunding around the tanks to a capacity at least equal to the largest tank. (NB: bunding requirements under Dangerous Goods legislation may apply only above a threshold capacity).

Disposal of effluent from dry cleaning solvent recovery process

The recommended means of disposal is collection by a waste contractor (NB: a waste contractor is required to dispose of the sludge from the same process).

Waste volumes

Laundries are urged to minimise water consumption and consequently the volume of waste generated. Laundries are subject to volumetric waste charges.

Temperature

If the discharge temperature of laundry / wet clean discharges exceeds the 38°C limit then an adequately sized cooling pit must be provided.

Trade waste discharge criteria

The final pre-treated waste discharge shall comply within the sewer admission limits outlined in *Information Sheet 26: Sewer Admission Limits*.

Other Issues

The pH of the liquid trade waste must be maintained within the range of 6.0 to 10.0 at all times. The pH must be adjusted, if necessary, before being discharged to the sewerage system.