

Acceptance guideline 6: Laundry and dry cleaning waste

Overview

The purpose of this acceptance guideline is to outline under what circumstances Icon Water will permit the discharge of liquid waste into the sewerage network.

Under section 35 of the *Utilities (Technical Regulation) Act 2014*, it is an offence to discharge into the water or sewerage network any substance that is likely to interfere with the network, or form compounds that would be likely to interfere, unless the consent of the utility is obtained. Significant fines, imprisonment or both may result from an offence. Discharges entering a sewer that are in breach of the conditions set out in this guideline will probably constitute a breach of section 35 of the *Utilities (Technical*)

Types of premises

This Acceptance Guideline applies to dry cleaning establishments and laundry activities that are limited to those for public use, including a laundromat with coin-operated machines or a laundry (up to 5kL/d).

They do not include commercial or industrial laundries with discharge volumes greater than 5kL/d.

Regulation) Act 2014 and may lead to prosecution of the person discharging the waste, or allowing the waste to be discharged.

This guideline contains specific information on waste types and discharge requirements. The requirements of this guideline are in addition to the requirements specified in *Trade waste acceptance guideline 1: general acceptance criteria for liquid waste.*

Pre-treatment requirements

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

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 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:

$$V = V_H + V_H \times F$$
 $F = \frac{T_H - T_A}{T_A - T_C}$

Where,

V = the minimum volume of the pit at the water level below the outlet pipe

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

F = the estimated factor

TH = maximum temperature of hot water discharged into the pit

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

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

The applicant must submit the consultant's or supplier's calculations regarding the capacity of the cooling pit.

Table 1: Substances and properties of concern

Substance or property	Laundry or dry cleaning mate	rial Concern	Requirements for discharge to sewer
Solvents	Dry cleaning solvent	Very toxic	Dry cleaning solvents are not permitted into the sewer.
Sodium hydroxide & other alkaline salts	Alkaline detergents		pH limited to the range 6.5 - 10.0
Ammonia	Blood removers	Interference with sewage treatment process	Sewer discharge limit 50mg/l
Liquid hydrocarbons, petroleum spirit & other solvents	Spotting agents (e.g. adhesive, lacquer, paint remover, silk spotter)	Flammability	Containment (bunding) of solvent storage area required if drainage to sewer is possible
Sodium hypochlorite	Chlorine based bleaches		Free chlorine limited to 5mg/l
Temperature		Speed biological processes, toxic hydrogen sulphide and explosive methane. Vaporise toxic organics.	Discharge must be below or at 38°c
Solids		Lint / suspended solids containing fibrous material in the discharge would contribute to sewer blockages	Provide lint filters

Icon Water August 2016

Boiler blowdown and cooling unit bleed & blowdown

Chemicals proposed for use in boilers must be stated in the sewer discharge 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 acceptance guideline 10: cooling towers/boiler blowdown*.

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 expected to become subject to volumetric waste charges.

Further information

Additional information about the discharge of liquid waste into Icon Water's sewerage network is available at **iconwater.com.au/tradewaste** or by contacting us on **02 6248 3111** or via email on **talktous@iconwater.com.au**

Icon Water August 2016 3