Industrial Waste

Information Brochure

For further information, please visit our website at http://www.watercorporation.com.au/indwaste
Or if you prefer, call us on 13 13 95, or visit your nearest Water Corporation office

HOSPITALS – IWPUB35

For the purpose of this publication, hospitals refer to both private and public hospitals that provide medical or surgical treatment to patients.

It is important to note that some facilities may have the word "hospital" in their business title, but are actually classified as a "care facility". The management of industrial waste discharges from care facilities is described in a separate information brochure, 'Care Facilities' (IWPUB31), which can be downloaded from our website.

Permit Requirements

Hospitals discharging to sewer are required to apply for and obtain approval to discharge industrial waste. This approval is in the form of an industrial waste permit.

The permit attracts an Annual Permit Fee, which is invoiced in advance each July.

Quality/Quantity (Usage) Charges

Hospitals attract quality and quantity (QQ) charges, reflecting the industrial wastewater loading they add to the wastewater system.

The calculation of QQ charges for hospitals is based on the number of beds and the type of activities that occur at the site.

Investigation of the waste streams within hospitals has identified the following as the main waste producing processes:

- Theatre, Anaesthesia, Endoscopy and Central Sterilising;
- Hydrotherapy pool;
- Bin wash (if discharging to sewer);
- Mortuary (if performing autopsies);
- Radiology and imaging departments;
- Renal dialysis;
- Labs (ie. pathology, haematology, biochemistry, microbiology);
- Kitchen;
- Cafeteria;
- Laundry; and
- Blow down from boilers.

The quality/quantity charges for waste streams are calculated using one of the following three methods:

1. Set volume per bed equivalent;
2. Fixed volume for the waste stream regardless of facility size; and
3. Volume calculated based on the operation of the particular process.

The tables overleaf indicate the applicable methods and data for calculating each wastestream.

More Information?

You can find more information about the Industrial Waste service on our website at http:\\www.watercorporation.com.au/indwaste.

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Data Tables

Table 1: Bed Equivalent Rate Calculations

Wastestream	Volume kL/bed/yr	BOD mg/L	SS mg/L	TKN mg/L	TP mg/L	O&G mg/L
Theatre, anaesthesia, endoscopy or central sterilising	5	0	0	0	0	0
Bin wash to sewer	0.3	250	100	0	0	0
Kitchen (meal heat only)	5.1	660	190	0	0	0
Kitchen (meal preparation)	8.5	1240	275	29	12	91
Cafeteria (meal preparation)	1.5	1200	400	0	0	0
Laundry	42	80	40	0	0	0
Boiler blow down	0.06	0	0	0	0	0

Table 2: Process Fixed Volume Calculations

Wastestream	Volume (kL/year)	All Quality Parameters
Hydrotherapy Pool	120	0
Laboratories	26	0
Cafeteria (light snacks only)	50	0

Table 3: Process Operation Rate Calculations

Wastestream	Volume	Unit	BOD mg/L	TKN Mg/L	SO_4 mg/L	Silver mg/L
Mortuary	1	kL per post mortem	0	0	0	0
Radiology & imaging	1	kL per processor per day	600	155	1560	1.5
Renal dialysis	0.03	kL per unit per hour	0	0	0	0

Note: In addition to the wastestreams detailed above the use of products containing glutaraldehyde will be included in the QQ charges.

Glutaraldehyde does not impact on the volume or suspended solids load of the industrial waste however it contributes to the biochemical oxygen demand (BOD).