



LARGE HOTELS, RESORTS OR CONSTRUCTION / MINING CAMPS – PUB 39

For the purpose of this publication, large hotels, resorts or construction / mining camps are defined as a facility which has greater than 180 rooms for accommodation and will generally exclude apartment style hotels which have self contained room facilities for food preparation.

Permit Requirements

Large hotels, resorts or construction / mining camps 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.

Investigation of the waste streams within large hotels, resorts or construction / mining camps has identified the following as the main waste producing processes:

- Kitchen (food production/preparation)
- Laundries
- Swimming pools
- Vehicle wash bays
- Cooling towers (commercial climate control system)

The permit attracts an Annual Permit charge, which is invoiced in advanced each July.

Quality-Quantity Usage Charges

Large hotels, resorts or construction / mining camps attract quality and quantity (QQ) charges, reflecting the industrial wastewater loading they add to the wastewater system and are levied quarterly in arrears. The calculation of QQ charges is based on the type of activities that occur at the site and is shown in the tables below.

Cooling towers will only be charged as volume only. Volumes will be determined by the installation on a meter on the bleed line prior to discharging to sewer. Refer to information brochure, Commercial Climate Control Waste Pub19 and Typical Drawing HX33-18-40 – Cooling Towers.

Swimming Pools will not be charged QQ charges due to the small size of the pool. They are required to comply with the guidelines as described in the information brochure, Commercial Swimming Pools and Spas – Pub20 and Typical Drawing HX33-18-30 – Commercial Swimming Pools and Spas.

Kitchen (Food Production / Preparation)

This waste stream will have a standard quality applied as shown in **Table 1** below.

Table 1 – Standard quality for food production/preparation waste streams

Conductivity mS/m	SS mg/L	BOD ₅ mg/L	O&G mg/L	TKN mg/L	TP mg/L	pH (units)	Acidity mg/L
140	660	1300	340	40	12	5.3	115

Laundry

This waste stream will have a standard quality applied as shown in **Table 2** below.

Table 2 - Standard quality for laundry waste streams

SS mg/L	BOD ₅ mg/L
40	80

Vehicle Wash Bay

This waste stream will have a standard quality applied as shown in **Table 3** below

Table 3 - Standard quality for vehicle wash waste streams

BOD ₅ mg/L	SS mg/L	O&G mg/L	TKN mg/L	TP mg/L	SO ₄ mg/L	Cu mg/L	Zn mg/L
158	73	14	5	4	51	0.25	0.50

BOD ₅ – Biochemical Oxygen Demand SS – Suspended Solids O&G – Oil and Grease TKN – Kjeldahl Nitrogen TP – Total Phosphorus SO ₄ – Sulphate Cu – Copper Zn - Zinc

Determination of Volumetric Component

The volume component for the kitchen, laundry and vehicle wash bay will be determined by either an effluent meter or a process sub-water meter in accordance with the Flow Measurement Information Brochure – Pub 09. The use of sub-water meters must incorporate both hot and cold water supplies direct into the process and will be subject to the following industrial waste discharge factor (IWDF) (shown in **Table 4**) to determine the chargeable proportion of water deemed as the industrial waste volume.

Table 4 - Industrial Waste Discharge Factor for Sub-Water Meters

Waste Stream Type	Industrial Waste Discharge Factor
Kitchen	90%
Laundry	85%
Vehicle Wash Bay	59%

Pre-Treatment & Plumbing Requirements

Kitchen

1. All wastewater (with the exception of the dishwasher) from the kitchen is to discharge to an accepted grease arrestor and sized in-accordance with Sizing of Grease Arrestors for the Retail Food Industry – Pub23 and typical drawing HX33-10-00.

Laundry

1. All wastewater from the laundry is to discharge to an accepted cooling lint in-accordance with typical drawings Cooling Pit HX33-18-50 and Commercial Laundries HX33-18-60.

Vehicle Washing Bay

1. All wastewater from vehicle wash bay is to discharge to an accepted pre-treatment fixture to remove hydrocarbons and settleable solids that may otherwise enter the sewerage system. The Water Corporation's industrial waste typical drawing External Mechanical Washdown Area with silt Sump (HX33-12-20) provides details of a suitable arrangement.
2. Sites must have an oil water separator such as Vertical Gravity Separator (VGS), Coalescing Plate Separator (CPS) or Hydrocyclone. Single, double or triple interceptors will not be accepted.
3. Only quick break detergents are to be used.

Cooling Towers

1. All wastewater from cooling tower is to discharge directly to sewer in –accordance with Commercial Climate Control –Pub19 and Typical Drawing HX33-18-40 – Cooling Towers.

Swimming Pools

1. All wastewater from a swimming pool is to discharge to an accepted balancing tank prior to discharging to sewer and in-accordance with Commercial Swimming Pools and Spas – Pub 20 and Typical Drawing HX33-18-30 - Connection to Sewer of Commercial Swimming Pools and Spas.

***Note:** In regional areas it may not be possible to accept commercial pool waste to sewer due to salt loading in the wastewater system which can affect treated water re-use. The Water Corporation will assess local conditions and advise.*

General Requirements

All water supply and wastewater connections associated with the facility must be carried out by a licensed plumber in accordance with AS/NZS 3500.

More Information?

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

Or if you prefer, please call us on 13 13 95.