



CAR WASHES – PUB 32

For the purpose of this publication a car wash is a facility available to the public for the washing of motor vehicles and refers specifically to the types or combinations of processes in Table 1 below:

Table 1: Car Wash Types

Car Wash Type	Description
Conveyor	An automatic car wash in which a vehicle is drawn on a conveyor belt through a tunnel
Roll Over	An automatic car wash in which brushes roll over a stationary vehicle
Touchless	An automatic car wash in which a series of water jets pass over a stationary vehicle. No brushes are used.
Bays	A vehicle is manually washed by the driver, using facilities provided at the site, such as high pressure hoses.

This document does not include vehicle washing associated with car detailers, stock transport, buses, trains or other forms of transport. These sites are assessed and managed individually. Contact the Water Corporation's Commercial & Industrial Services section.

Permit Requirements

Car wash premises require an industrial waste permit to discharge process wastewater to sewer. There is an annual charge for this permit. Application forms and supporting information can be downloaded from our website.

Quality-Quantity Usage Charges

The quality and quantity of the industrial waste discharged to sewer is dependent on the type of car wash process. The Water Corporation has carried out an investigation to determine the typical quality and quantity of industrial wastewater discharged to sewer from car washes so as to set standard charges. Charges are based on the quality and quantity of wastewater discharged and are levied 6-monthly in arrears.

Determination of Effluent Quality

The typical quality of wastewater from each type of car wash process is shown in Table 2. These standard parameters apply to all car washes of a particular type.

13 13 75 Faults, Emergencies & Security
13 13 95 Technical Enquiries
13 13 85 General Enquiries

Printed on environmentally friendly paper



www.watercorporation.com.au

Table 2: Wastewater Quality and Industrial Waste Proportion for Car Wash Groups

Group	%IW Prop	BOD	SS	O&G	TKN	TP	SO4	Cu	Zn
Bays	59	158	73	14	5	4	51	0.25	0.50
Rollover Touchless +	82	21	23	6	1.5	0.5	30	0.15	0.20
Rollover, Touchless, or Conveyors Bays +	72	143	58	21	3	10.5	42	0.15	0.30
Conveyors	72	260	76	11	8	2	92	0.45	0.55

* All units in mg/L unless stated otherwise.

Sites are not assessed independently. Customers may request an independent assessment of their site at their cost. The outcome of this assessment will be used for charging and may result in charges being higher or lower than the standard charges.

Determination of Effluent Quantity

A percentage of water is not discharged to sewer but is lost to the environment through evaporation, atomisation and vehicle carry out. The remaining percentage of water, which is discharged to sewer, is referred to as the Industrial Waste Proportion.

The quantity charge for each type of car wash process is determined by metering and will depend on the water consumption at each site.

Calculating Quantity from Water Supply Meter

The volume component is preferably determined from the site main water meter. A Water Corporation officer will determine the fraction of water consumption entering the car wash process, termed the IW Input %, by excluding other site water usage such as toilets, gardens and sinks from the total water consumption.

Calculating Quantity from Sub-water Meter

If the site has multiple tenancies or other predominant water uses other than a car wash, a sub-water meter that specifically meters the incoming car wash process water will be required. As all the water through this meter goes to the carwash the IW Input % will effectively be 100%.

The following table illustrates these two methods.

Table 3: Calculating Industrial Waste Volume

<p>Site Main Water Meter</p> $\text{IW Vol (kL)} = \text{Main Water Meter Vol (kL)} \times \text{IW Input (\%)} \times \text{IW Proportion (\%)}$
<p>Sub-Meter on Process Feedwater</p> $\text{IW Vol (kL)} = \text{Sub Water Meter Vol (kL)} \times \text{IW Proportion (\%)}$

Industrial waste quality-quantity charges for carwashes are lower than the business domestic charges that would otherwise be applied, as the industrial waste charging regime reflects the low strength of carwash wastewater and that a portion of water entering the carwash process is not discharged to sewer. However the application of the industrial waste charging regime to a carwash is conditional on the business installing and maintaining appropriate sub-metering, if it is determined by the Water Corporation that carwash volumes cannot be determined from the site's water supply meter. If this metering is required but not installed and maintained in a functional condition, the higher business domestic charges will be applied until such time as the metering is corrected and the Corporation notified.

Pre-Treatment & Plumbing Requirements

1. All wastewater is to discharge to an approved 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 (HX33-012-20) provides details of a suitable arrangement. This can be downloaded from our website.
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. All water supply and wastewater connections associated with the facility must be carried out by a licensed plumber in accordance with AS/NZS 3500.
4. Only quick break detergents are to be used.

More Information?

The current version of this information sheet is shown on the Water Corporation Internet site at http://www.watercorporation.com.au/I/industrialwaste_index.cfm. Further information on the issue detailed on this sheet can be obtained by phoning 13 13 95, or visit your nearest Water Corporation office.