

22. VEHICLE WASHING

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*

Description of activity

Vehicle washing activities (for automatic assumed concurrence) comprise commercial facilities that provide the following services:

- washing of cars by hand or with a high-pressure wand
- drive through car wash
- degreasing of car engines
- washing of car underbodies
- external truck washing.

This activity does not include high-volume processes, nor does it include the following processes:

- truck washing (internal)
- washing of hire equipment
- construction/plant equipment washing
- discharge from a covered forecourt or refuelling bay
- internal tanker washing
- internal washing of meat vans.

Those listed above may require additional pre-treatment.

Pre-treatment requirements

A coalescing plate interceptor (CPI/CPS) with a minimum capacity of 1000 L/h, a hydrocyclone separation system (HSS) or a vertical gravity separator (VGS) sized according to the influent flow rate must be installed to treat the liquid trade waste. The application should include supporting information in regard to sizing and the recommended maintenance schedule.

A collection well and non-emulsifying pump must also be provided as part of the pre-treatment system.

The units should be installed as per the manufacturer's instructions, and where applicable the distributor/supplier must be able to guarantee supply of parts and service maintenance.

A dry basket arrestor or screen must be fitted to all floor wastes that drain to the sewerage system, so as to strain out gross solids such as rags and packaging.

It should be noted that triple interceptor pits are not considered to be, nor are they approved as, appropriate pre-treatment equipment units for this type of wastewater.

Where proponents propose to wash and detail excessively muddy and soiled vehicles, the addition of a solids settlement pit/silt arrestor (minimum size capacity of 2000 L) is required prior to discharge to the proposed oil arrestor.

For premises with a truck wash a solids settlement pit or a general purpose pit minimum capacity 1000L must be provided prior to an oil arrestor.

Other issues

Detergents

Only quick-break detergents are to be used in the washing process. All chemicals should be stored in such a manner that spills and leaks are prevented from entering the sewerage or stormwater systems.

Stormwater

The wash area must be roofed to exclude rainwater from the sewerage system. Measures are also required to divert any stormwater away from the wash area(s).

Where the areas are unroofed or partly roofed and it is not possible to roof them, measures will need to be taken to divert stormwater away from these areas. Measures will also be required to minimise the volume of rainwater that falls onto the actual wash areas from entering the sewerage system.

Important Note:

The discharge of stormwater to sewer is not permitted. All broad areas draining to sewer such as wash down bays must be roofed and bunded to prevent the entry of stormwater, including rain descending at an angle of up to ten degrees from the vertical. If bunding is not practical or possible, then grated stormwater drains and/or the grading away of surfaces surrounding the sewered area may be used to achieve the same purpose. In all cases the design must prevent runoff from any storm with an intensity of up to a 20 year Average Recurrence Interval (ARI) from entering the sewer. Where the stormwater catchment threatening the sewered area with inundation, is greater than 100 square metres, the application must be accompanied by a certificate from an engineer who is currently registered on the Queensland Professional Engineers Register, to verify the design's capability. The customer must ensure that stormwater drains remain free from debris and/or other obstructions that would restrict or block the flow of stormwater.

Electrical equipment used in treating liquid trade waste

Flammable Class 3 liquids (see Australian Dangerous Goods Code), such as petrol, kerosene or other solvents, are potentially dangerous in the workplace. Although these substances must not be discharged to the sewerage system, there is the potential for them to be present or situated near an oil arrestor. Where a process has flammable liquids present, all electrical equipment within a defined area must be of special construction to avoid a dangerous situation occurring. For instance, if the applicant is proposing to install an oil arrestor, they must check that the electrically operated pump and other electrical devices have the correct electrical rating for the purposes for which they are used. A licenced electrical contractor must connect the treatment system to the electricity supply. The contractor will then submit to the electrical distributor a notice on the electrical work performed at the premises and provide the applicant with a copy.

Maintenance

It is the responsibility of site management to ensure the effective operation of all pretreatment equipment, by ongoing removal of accumulated material from channels, silt traps and coalescing plate packs, and timely removal of accumulated solids from settling pits by a licensed liquid waste contractor.