

Wastewater Dump Point Design

Introduction

Wastewater dump points are public facilities usually provided by local governments, caravan parks or tourist organisations. They are designed to receive toilet waste and wastewater from transitory caravans and other vehicles equipped with toilet and sanitary fixtures.

Dump points are not sewage treatment systems, and are not designed to accept fixed and continual disposal of effluent from caravans and other vehicles. They are designed to collect once-off discharge from such vehicles into a holding tank for collection, or into a reticulated sewer managed by a licensed service provider.

The scope of this document is to provide a guideline on how to install and/or construct onsite wastewater dump points.

Approval to construct and/or install a dump point

Dump points that connect to holding tanks must be approved for installation and use by the relevant local government in accordance with Regulation 50(1)(b) <u>Health (Treatment of</u> <u>Sewage and Disposal of Effluent and Liquid</u> <u>Waste) Regulation 1974</u> (external site).

An application must be lodged every time a dump point is constructed or installed. This should be referred to the Local Government in the first instance by completing an <u>application</u> form (PDF 350KB).

Dump points that connect to sewers must be assessed and approved by the licensed service providers' trade waste requirements.

Constructing a dump point

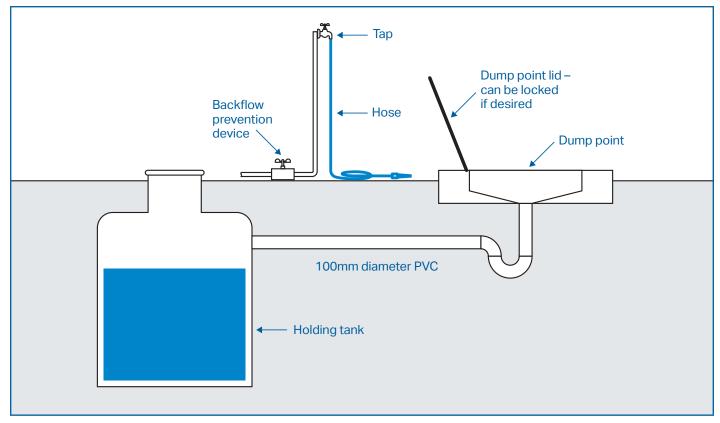
Dump points consists of a receptacle which allows users to easily connect or empty their wastewater storage tank. Only WaterMark ATS5200.482 certified receptacles can be installed in Western Australia.

Dump points should be equipped with:

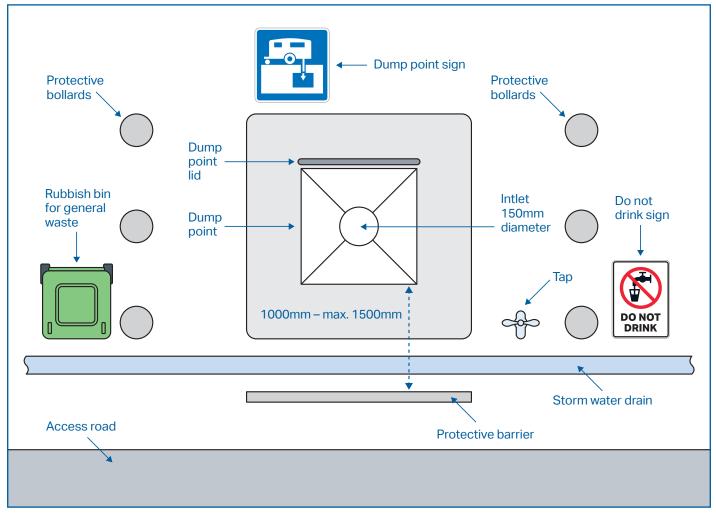
- a tap and hose for washdown of wastewater canisters from vehicles and dump point.
 A back-flow prevention device should be installed to prevent scheme water contamination from the hose and wash down area. All plumbing work must be done in accordance with Australian Standard AS 3500.
- barriers to prevent vehicle damage without hindering user access
- adequate drainage to prevent storm water entering the dump point and holding tank
- adequate signage to make people aware of the location
- sufficient room for vehicles to manoeuvre
- a lockable access lid to prevent misuse
- a raised road to allow gravity assisted flow of wastewater from the vehicle
- a suitable floor surface (e.g. an existing floor surface or cast into a concrete slab).

The following diagrams show the layout of a typical dump point.

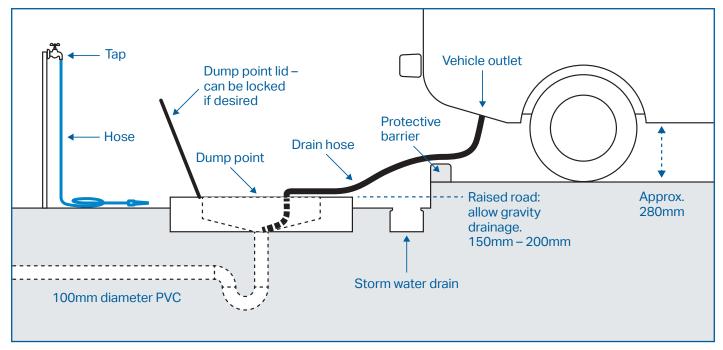
health.wa.gov.au



Dump point layout (not to scale)



Dump point - top view (not to scale)



Dump point - side view (not to scale)

Holding tanks

Determining holding tank capacity requires consideration of both design and operational aspects. The required capacity depends upon both anticipated daily sewage flow and available or optimal pumping service frequency.

Holding tanks must be approved by the Chief Health Officer, to the requirements of Regulation 50(1)(b) of the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations* 1974.

The Department of Health website maintains a compilation of Australian Standards for water holding tanks and guidance on their performance requirements.

All associated plumbing work must be carried out in accordance with the *Plumbers Licensing and Plumbing Standards Regulations 2000*.

Locations

Consideration should be given to the following points when selecting a site for a dump point:

- Dump points should be:
 - easily identified, user friendly and safe to use
 - easily and safely accessed by all caravans and vehicles (adequate spacing should be provided for 2 vehicles to pass each other)
 - installed as close to the road as possible and be located so that the road is at least 100mm above the unit, to allow gravitational flow from the vehicle to the dump point.
- Dump points should not be installed:
 - close to waterways or in areas with a high-water table – refer to the <u>Health</u> (<u>Treatment of Sewage and Disposal of</u> <u>Effluent and Liquid Waste</u>) Regulation <u>1974</u> (external site) minimum setback requirement
 - in high volume and high-speed traffic areas
 - near playgrounds, picnic areas or toilet blocks
 - where the facility could be flooded by stormwater.

Access roads can be designed in 2 ways:

Drive through dump points – Figure 1

- Vehicles can enter from a road, empty at the dump point and then depart via an exit road (reversing is not preferred).
- If possible, vehicles should be able to enter from either direction of the road to allow for discharge points to be located immediately adjacent to the dump point.

Street ending in a loop or a turning circle – Figure 2

 If a drive through dump point cannot be provided, a vehicle turning circle of at least 35m should be provided. Enough distance should be given to enable a vehicle to correctly align with the dump point.

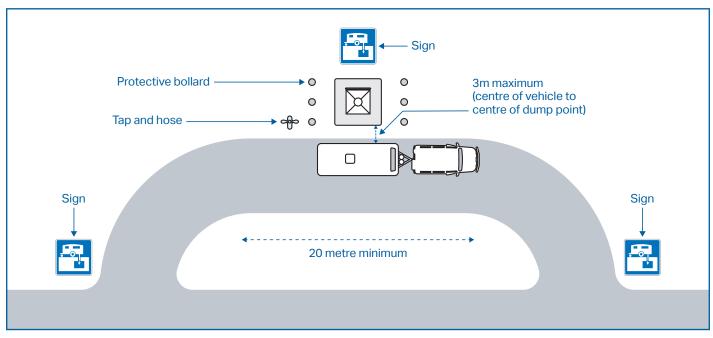


Figure 1: Dump point assembly – Drive through dump point

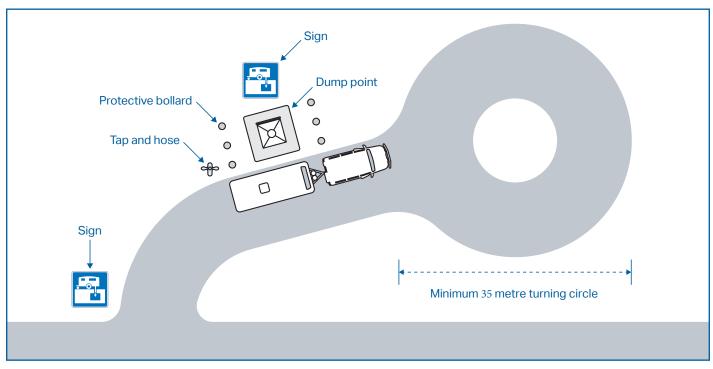
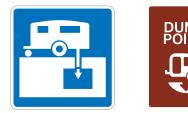


Figure 2: Dump point assembly road access with turning circle

Signage

Dump points should be clearly signposted at the entrance and exit to identify the best access way and associated directions for use.



Example of dump point signage

'Do not drink' signage should be placed next to the washdown tap and hose. The recommended sign is shown below.



Maintenance

- Dump points should be cleaned at least twice weekly (or in accordance with manufacturer specification) with septic safe cleaning products. Antibacterial or strong chemical cleaners are not recommended, as these products can affect the bacterial digestion processes in wastewater treatment plants.
- Wastewater levels in the holding tank should be regularly measured to prevent overflow.
- Holding tanks should be serviced and emptied by a licensed contractor as required.
- Backflow devices should be regularly maintained and tested to prevent contamination.

 Wipes, including flushable wipes, sanitary pads and nappies should not be disposed of into the holding tank, as these can block the system – rubbish bins should be provided next to the dump point to allow for their disposal along with any other rubbish.

Wastewater disposal

Pumping, hauling and disposal must be managed by a licensed sewage pumping contractor in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004.*

Disposal of sewage must be at a site or sites approved by the Environmental Health Officer in the jurisdiction where the sewage is disposed. Sewage from the holding tanks is not permitted to be discharged on to or into ground or surface waters.

Discharge to a sewer must be assessed and approved in accordance with the licensed service provider's trade waste requirements and the *Water Services Act 2012*. For example, see <u>this guidance from the Water</u> <u>Corporation</u> (external site).

Locations in Western Australia

The location of wastewater dump points within WA can be found on the <u>National Public Toilet</u> <u>Map</u> (external site).

More Information

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