DUMP STATION GUIDE

New Zealand Motor Caravan Association

August 2015

DUMP STATION FUNDING



Dump stations are small facilities that help protect public health and the environment by ensuring the

proper disposal of black and grey waste water from motor caravans and caravans.

The NZMCA provides assistance for the installation of public dump stations by way of a:

(1) pre-cast unit (and fittings) built to NZS 5465:2001 – NZ Standard for Self Containment of Motor Caravans and Caravans – that requires minimal work to assemble and install, along with the appropriate signage to assist the public in locating the site;

(2) if necessary, additional financial assistance (assessed on a case by case basis).

In return, we require the dump station to meet the following conditions for its economic life:

- Accessible to the general public 24 hrs a day
- Accessible for large vehicles (e.g. 12m buses)
- Built to a design that meets the approval of NZMCA and relevant Council requirements
- Able to be used for no charge (We are not opposed to a donation so long as the donation is not 'required')
- In a location where NZMCA members have verified a need for a dump station (The NZMCA will investigate this part once we have your request for funding)

The NZMCA has a limited budget, so meeting the above conditions **does not guarantee** that funding can be approved in that financial year.

You may purchase units and signs. Please visit www.nzmca.org.nz for an order form.

We publish the location of dump stations in our members' Travel Directory, bi-monthly Motor Caravanner magazine, and website.

If the dump station is well-designed and fully accessible, then no one has any excuse for not using the facility and this will help protect public health and the environment from indiscriminate waste disposal.

To apply for **funding**, submit the application form at the end of this guide and include any necessary supporting documentation.

NZMCA representatives are willing to volunteer their expertise and assist local authorities, organisations and contractors to find suitable locations for dump stations, and provide technical advice for installation.

DUMP STATION INSTALLATION

Dump stations need to be positioned with appropriate access, e.g. drive through, or a large turning area, for longer length vehicles as motor caravans can be up to 12m long and can have their tank release valves on any side of the vehicle.

Constructed dump stations:

Appendix B of NZS 5465:2001 (below) outlines the minimum requirements for dump station installations.

Below is a photo is a photo of a practical dump station installed in Omokoroa, giving an idea of the size and look of the facility, and a schedule of materials and plans for the 'ideal' dump station.

We recommend you use a gully trap in the dump station with a removable grate for people to empty portpotties, or use non-standard sized hoses without spillage or blockage.

If you have no grate over the open hole of the gully, the station will need a lid to keep out litter and leaves.

Two x 1m posts either side of the dump station is recommended to prevent vehicles driving over the top and damaging the unit.



NZS 5465:2001

Appendix B - Dump station installations

R 1

Dump stations for the disposal of waste water from the waste tanks of motor caravans and caravans having self containment certificates in accordance with this Standard shall comply with the following minimum requirements.

Note: waste outlets can be on either side of the vehicle.

B 2



The station shall be on an un-floodable level site with a good vehicular access and egress, and should be clearly marked with this complying sign. *Ideally, large vehicles should*

be able to "drive by" from either direction.

В3

The station shall consist of:

a) A self cleansing unit of at least 600 x 500 mm with an upstand surround of not less than 100 mm, above the adjacent carriageway or on sealed surfaces 25 mm with a gradient to the outlet of at least 1 in 60.

The following is to clarify the above instructions:

(i) A self-cleansing unit of at least 600 x 500mm with an internal upstand of not less than 100mmn with an internal gradient to the outlet of at least 1 in 60;

(ii) The external upstand of the Dump Station not more than 100mm and not less than 25mm above the carriageway serving the facility.

For current drainage regulations refer to Acceptable Solution G13/AS2.

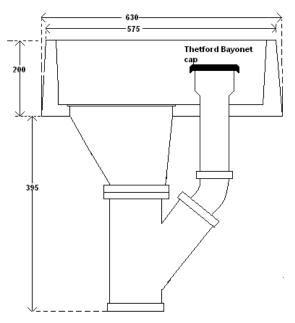
- b) The following shall be mounted in the base:
 - i. A 75mm diameter bayonet coupling;
 - ii. A 75 mm diameter cap to seal the bayonet coupling;
 - iii. A 100 mm N.B. floor waste outlet with protective grate; or
 - iv. A 100 mm N.B. sewer pipe with a water seal.
- c) Mounted over the base shall be:
 - i. A water standpipe with the tap, and backflow prevention device as approved by the local authority consent not less than 450 mm above the base;
 - ii. A flexible hose of not more than 300 mm length attached to the tap.

В4

The installation shall be connected to a waste water treatment system and shall comply with all appropriate regulatory and bylaw requirements.

PRE-CAST DUMP STATIONS

In an effort to standardise the construction of dump stations around New Zealand, we have developed a precast lightweight version to comply with NZS 5465:2001.



Top of unit Base of unit

540 x 575mm 590 x 630mm

Lid

600 x 600mm with hinge straps embedded

into concrete surround

Total weight

approx. 80kg

Gully trap Grating dish adjustable supplied if required

inside gully dish





SCHEDULE OF MATERIALS: DUAL BAY DUMP POINT (see figure 2)

Note: A building consent application will have to be gained for approval to construct the foul sewer drainage portion of this work.

Island

 'Dump point' island [typical size 9000 x 800mm] with rounded ends. Constructed with concrete kerb to perimeter with 100mm thick concrete slab 2850mm long in centre and grassed surfaces each end. Include all reinstatement of surrounding surfaces. Note: Lip of dump station unit should be flush with surface of concrete slab to remain no more than 100mm from the carriageway.

Water

- Water supply pipe from existing reticulation run to one outlet in the island including all necessary excavation, imported fill, backfill, surface reinstatement, pipe work, fittings, connection to existing system as required.
- 1 No. vertical water supply pipe finishing 1100mm above island with bend and extension for tap, fixed with saddle clamp to timber post.
- 1 No. backflow prevention device.
- 1 No. Self closing bib tap (for non-potable water tap)
- 1 No. Self closing bib tap with screwed ruff (>15sec timer) or standard brass hose tap (for potable water).
 Contact us for further information on bib taps.
- 1 No. 500mm long flexible hose pipe and coupling for attachment to tap.
- No.100 x 100 x 18000 long H5 Tanalised Pine posts set in ground and bedded in concrete.
- 1 No. Non-potable water sign mounted on post.
- 1 No. Drinking water sign mounted on post where fresh water supply is located.

Foul Sewer Drainage

- 1 No. Building consent approval.
- 1 No. 100mm diameter sewer branch pipe work from existing foul sewer system to new vehicle dump point including all necessary excavation, imported fill, backfill, surface reinstatement, pipe work, fittings, connection to existing system as required in accordance with Local Authority requirements.
- 1 No. 700 x 550 precast concrete surround set in concrete slab.
- 1 No. 100mm diameter sewer P-trap, connected to new pipe work.
 - 1 No. 100 x 100 x 75 dia. sewer pipe junction.
 - 1 No. 300 x 210 Marley gully 1575-100 without grate, bed in concrete.

- 1 No. 75 dia. sewer pipe in vertical extension with bend as detailed connected to branch, terminating with 75 bayonet coupling set in concrete.
- 1 No. 75 dia. airtight cap to coupling with chain stay fixed to concrete.
- 1 No. Cement plastered grading of concrete base of sump trap to falls.

Metal lid/cover (supplied with approved funding)

- 2 No. Purpose made hinges each comprising two lengths 50 x 6 MS flat, one end fish tailed for casting into concrete, both drilled for and complete with M12 bolt and locking nut, other end welded to checker plate lid.
- 1 No. 700 x 550 x 6mm checker plate cover with lifting ring.
- 1 No. Hot dip galvanise plate and hinges
- 2 No. Cast hinges into concrete base.

DUMP STATION SIGNS

When a new public dump station is to be installed we may provide the following signs:

Small300 x 300mm, single sidedMedium300 x 580mm, double sidedLarge470 x 900mm, double sided

Water 150 x 210mm, potable and non-potable

Medium and large signs come with brackets and straps.

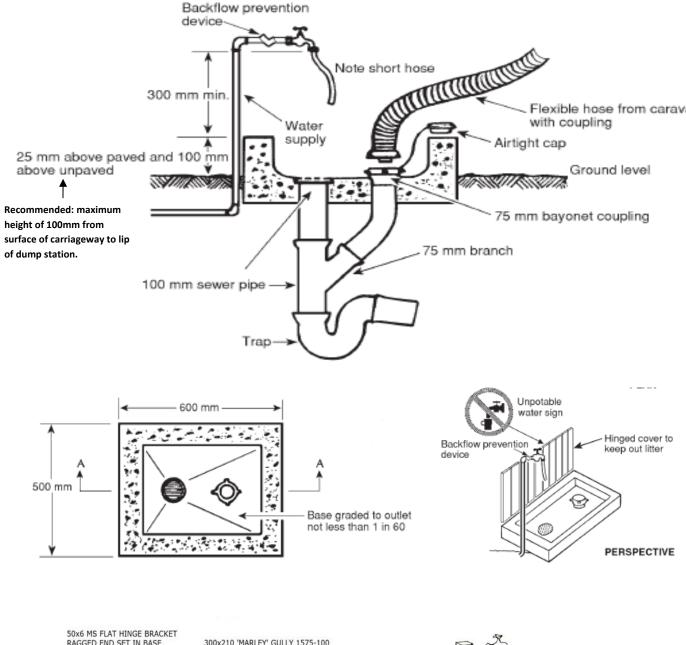






Small, medium and large signs in situ

Figure 1 — ILLUSTRATIONS OF TYPICAL DUMP STATION SET UP



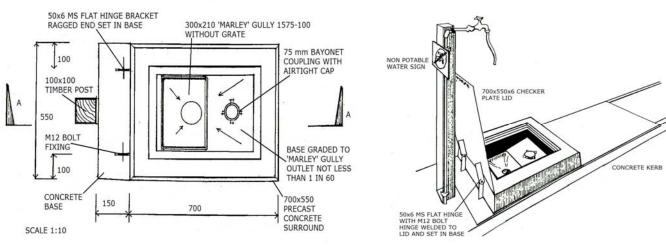
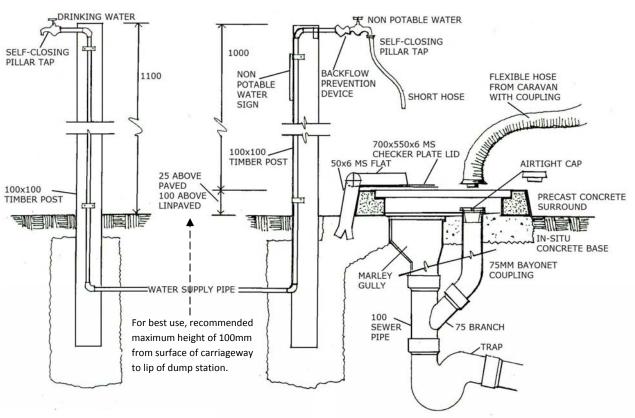
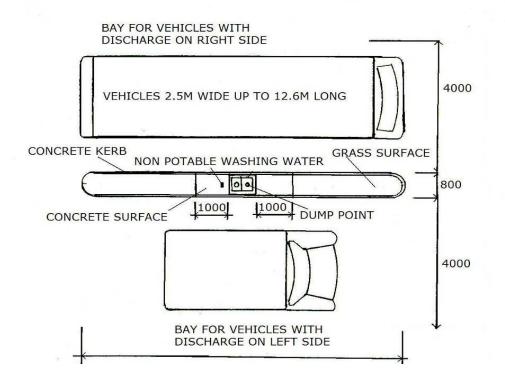


Figure 2 - DUAL VEHICLE DUMP POINT IN ACCORDANCE WITH NZS 5465:2001



If fresh water tap/s are to be included in the installation, it is recommended that they be installed as far away from the D/S carriageway as the site will allow. With the increasing numbers using the facilities congestion can occur frequently.



Other conditions: **DUMP STATION ASSISTANCE REQUEST FORM** Pre-cast unit Signs Gully trap Site name: Contact person(s): Please ✓ signage required: ✓ Small 300 x 300mm, single sided Email: Plaque 200 x 45mm, single sided Medium 300 x 580mm, double sided Dump station delivery address: ______ Large 470 x 900mm, double sided, meets NZTA req. for State Highways Installation date: _____ Potable (water) 150 x 210mm ☐ Non-potable (water) 150 x 210mm Dump station location: _____ GPS Coordinates (if known) Latitude: Longitude: Please attach: Please ✓ whichever applies: Consent approval / confirmation from local ✓ Will be built to a design that meets the approval of council to install the NZMCA and local council ✓ Accessible 24 hours a day, 365 days a year Plans/drawings ✓ No usage fee Covering letter (if requiring financial assistance) Septic/holding tank (limited capacity) **Estimated total installation costs** Fresh water provided near dump station New Zealand Motor Caravan Association Inc. P.O. Box 72147, Papakura 2244 Large vehicle access Fax: 09 298 5646 Phone: 09 298 5466 Email: ina@nzmca.org.nz