



# Supplement to Regulation 29 – Wastewater system loading rates

This factsheet is designed to be read in conjunction with Regulation 29 of the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974* (Regulations).

The wastewater system (septic tank) loading rates prescribed in Regulation 29 are limited to a number of broad applications. The purpose of this fact sheet is to provide designers of wastewater and associated disposal systems with a more comprehensive list of equivalent premises and uses. The figures below are to be read in conjunction with Regulation 29(1).

This supplement does not cover every possible application and system designers are asked to contact the Water Unit of the Department of Health for further information if a particular use is not listed below.

The following table forms the Department of Health WA’s assessment criteria for systems assessed under the Regulations.

**Table 1: Human waste hydraulic loading rates**

| <b>Type of Premises (Regulation 29)</b> | <b>Equivalent Use</b>   | <b>Combined Flow (L/person/day)</b> |
|---|---|-------------------------------------|
| <b>Hotel</b>                            | Minesite Accommodation Camp Units   | 180                                 |
| <b>Motel</b>                            |   | 140                                 |
| <b>School (boarding)</b>                |   | 140                                 |
| <b>School (day)</b>                     |   | 45                                  |
| <b>Public Building (frequent use)</b>   | Offices (non-showering staff)<br>Minesite office facilities<br>Restaurants sit in customers (per sitting)<br>Café sit in customers (per sitting)<br>Church (with cooking and catering facilities)<br>Winery sit in customers – Café and food catering facilities (per sitting)<br>Bakery sit in customers (per sitting) | 30                                  |

| Type of Premises (Regulation 29)        | Equivalent Use  | Combined Flow (L/person/day)                                   |
|---|---|--|
| <b>Public Building (infrequent use)</b> | Library<br>Community hall<br>Hardware stores<br>Health centre patients (non-showering)<br>Church (with no cooking facilities)<br>Petrol station customers   | 10   |
| <b>Caravan Parks</b>                    | 3 persons / caravan park bay<br>2 persons / tent site<br><br><b><i>Park homes / chalets</i></b><br>2 or less bedrooms/dwelling<br>3 bedrooms/dwelling<br>4 or more bedrooms/dwelling                                | 140<br>140<br><br>564/dwelling<br>761/dwelling<br>829/dwelling |
| <b>Swimming Pool</b>                    |   | 15   |
| <b>Drive-in theatres</b>                | 2 persons per car   | 10   |
| <b>Factories &amp; Shops</b>            | Restaurant staff<br>Café staff<br>Bakery staff<br>Office staff (using shower facilities)<br>Health centre patients (using shower facilities)<br>Gym (with showers)<br>Caravan park staff member (not living onsite) | 70   |
| <b>Construction camps (temporary)</b>   |   | 45   |
| <b>Clubs</b>                            |   | 15   |
| <b>Clubs (licensed)</b>                 |   | 35   |

There are other types of wastewater generating activities that are not specified by Regulation 29. Under these circumstances the following will apply:

**Table 2: Commercial / industrial waste hydraulic loading rates**

| <b>Wastewater Source</b>                  | <b>Examples</b>  | <b>Activity</b>  | <b>Total Flow (Liters/day)</b>  |
|---|--|--|---|
| <b>Food premises/<br/>Food production</b> | Cafés,<br>Restaurants,<br>Bakeries, etc.                 | Cooking and food production operations (eg. equipment and floor wash down) - excludes personal hygiene | Refer to Note 1   |
| <b>Commercial waste streams</b>           | Winery<br>Brewery<br>Abattoir                            | Bottle rinsing<br>Wash down<br>Processing  | Systems must be separate and not combined with any human waste stream.<br><br>Also<br>Refer to Note 1 |
| <b>Non-human waste systems</b>            | Washdown bays<br>Carwash<br>Dog kennels<br>Horse stables | Wash down  |   |

Note:

- 1) System owner to propose wastewater / liquid waste hydraulic loading. Hydraulic loading must be based on peak flow events. The following controls will be implemented:
  - Metering of wastewater / liquid waste volumes produced
  - System owner to ensure the maximum capacity of the system is not exceeded

## More information

Water Unit  
Environmental Health Directorate  
Department of Health  
PO Box 8172  
PERTH BUSINESS CENTRE WA 6849

Telephone: (08) 9388 4999  
Fax: (08) 9388 4910

19 June 2014

Produced by Environmental Health Directorate  
© Department of Health, Western Australia 2014