

ATTACHMENT I: EQUIVALENT TENEMENT (ET)  
METHODOLOGY

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## Equivalent Tenement (ET) Methodology

TasWater utilises the Equivalent Tenement (ET) methodology as the basis for calculating sewerage service target prices. The ET methodology is based on the Water Services Association Australia (WSAA) Sewerage Code and the Water Directorate and adjusted to best reflect Tasmanian circumstances<sup>1</sup>.

The Water Directorate published the *Section 64 Determinations of Equivalent Tenements Guidelines* in January 2005. The document was originally developed by Hunter Water Australia under the direction and peer review of the Water Directorate's Policy sub-committee.

The methodology for the setting of the actual charge per ET is set out in the document *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (published by Victorian Dept. of Land and Water Conservation in December 2002).

The guidelines provided TasWater the basis for determining the ET loadings, where ET is a measure of the load a property places on the sewerage system, and is based on the discharge of a standard residential dwelling. An 'equivalent tenement' or one ET is considered to be the loading on TasWater's sewerage infrastructure in terms of sewerage loadings for average residential dwelling or house.

It is accepted that there is variability in peak demands for residential use due to numerous factors, including:

- household occupancy rates
- climatic variability (eg. rainfall, temperature, humidity)
- socio –economic variability (extent of household fixtures and gardens)
- the presence of water meters and two part pricing
- penetration of demand management principles.

It is administratively efficient and cost effective to apply a standard for residential properties, which is also common practice. In relation to non-residential customers, various property attributes, including building area, land size, number of occupants, general public entertainment facilities, hospital beds and amenities, are used to undertake an ET assessment.

ET assessments are used to calculate a customer's sewerage service charge target price. The sewerage service charge covers costs associated with treatment and disposal of domestic sewage.

A customer's sewerage service charge target price increases proportionally with the ET assessment, with non-residential properties charged based on the load they place on the sewerage system relative to a single residential dwelling.

For sewerage charging purposes, no customer can be less than 1 ET, unless the property is within serviced land but not connected (undeveloped land), for which they will receive a unconnected sewerage service charge, which equates to 60 per cent of the full sewerage service charge (0.6 ETs).

The practical application of the ET methodology means that if a property is deemed to discharge twice as much sewage into the sewerage system, it will be assessed as 2 ETs and the target price will be twice the standard sewerage service charge. Similarly, if the customer discharges 50 times as much as a residential dwelling it will be assessed as 50 ETs and the target price will be 50 times the standard sewerage service charge.

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<sup>1</sup> For example, some rates have been adjusted down to reflect that customers (where relevant) see separate trade waste charges.

Where a property has multiple activities on the land parcel the ET assessment is based on a calculation for specific type of activity, noting discharge of non-domestic liquid trade waste is recouped through the application and payment of trade waste charges. It should be noted the list of categories is not exhaustive and consequently TasWater has included the ability to assess on an ad hoc, case by case basis if the circumstances warrant.

As expressed in the guidelines, it is preferable to apply localised ET figures as there are variances in differing jurisdictions TasWater has adopted a state wide methodology consistent with the application of postage stamp pricing across the State.

ET categories, the detail of which is set out in Attachment J, can be summarised as follows:

### **Residential user categories**

The majority of property lots are residential lots on standard allotments. It is generally accepted that a loading of 1 ET is applicable for sewer for residential lots.

Where the lots are classified as multiple-residential if more than one domestic dwelling is located on a single allotment, the number of ETs will be multiplied by number of dwellings. These lots types which may include, duplexes, units (including self care retirement units), flats, apartments, granny flats and other separated dwellings on a the lot each will receive one ET.

### **Non-residential user categories**

#### **Accommodation both permanent and short-term**

This category includes accommodation dwellings or rooms that are occupied permanently or semi-permanently, but are generally developed on land zoned for commercial purposes. Subcategories include Caravan / Mobile Home Park (with permanent occupation), Boarding House, Nursing Home and Self Care Retirement Unit.

Short term accommodation includes accommodation dwellings or rooms that are occupied temporarily, and are generally developed on land zoned for commercial purposes. Subcategories include Caravan Park, Motel, Backpackers, B&B and Serviced Tourist Apartment.

Irrigation and additional entertainment and sporting facilities such as restaurants, bars, swimming pools, gyms and golf courses are considered separately.

#### **Business, excluding food preparation**

This is a broad category covering general and specific commercial / business development, but generally excludes developments associated with food preparation. General subcategories include Single Shop, Supermarket, Shopping Centre and Office. Specific subcategories have also been included to cover business developments that are likely to differ substantially from the average demands and loadings for the general subcategories. Consequently, the specific subcategories are used where available, in place of the general subcategories.

#### **Food preparation**

This category covers general and specific commercial / business development associated with food preparation. General subcategories include Restaurant / Cafe, Takeaway / Fast Food and Catering. Specific subcategories have also been included to cover business developments that are likely to differ substantially from the average demands and loadings.

#### **Entertainment**

This category covers commercial / business development associated with entertainment. Subcategories include Pub / Bar, Licensed Club, Theatre, Function Centre and Marina.

#### **Sporting/spectator facilities**

This category covers general and specific commercial / business development associated with sporting and spectator facilities. The general subcategory is Amenities & Indoor Facilities.

Additional specific facilities such as swimming pools and food preparation areas are considered separately, as should irrigation. Specific subcategories have been included to cover additional sporting facilities that are likely to differ substantially from the average loadings for the general subcategories (e.g. Bowling Alley, Swimming Pool). Consequently, the specific subcategories are used where available, in place of the general subcategories.

### Community facilities

This category covers commercial / business development associated with community facilities. Subcategories include Child Care, Education, Correctional Centre, Church, Community Centre and Public Amenities Block.

### General

This category covers basic light industrial such as bulk storage and dry trades and uses the office and/or the factory/warehouse factors as applicable. This could include mixed use such as multiple use free hold titles which are assessed on a case by case basis, based on their specific configurations.

### Other

Within TasWater's serviced land area there are some lots which do not support development. These are typically small strips of land, including Telstra/Aurora and council properties that have no sewerage facilities (limited to exchanges, sub-divisions, roundabouts/parks that have no buildings on them or small pieces of land, which may include private parcels that have no likelihood of future development).

### ET assessment process

With respect to assessing a customer's property calculated ETs, the following steps are undertaken:

**Step 1** – Use a combination of data sources such as site visits, local knowledge, google maps, direct customer contact and council data, to ascertain the property type and associated property attributes.

**Step 2** – Identify customers who have a property within serviced land that is not physically connected to TasWater's infrastructure but which has the ability to connect. These customers' receive an ET of 0.6 of one (1) ET.

**Step 3** – Attribute a default one (1) ET to all identified standard residential customers. ETs for identified non-residential customers, eg. commercial, industrial, primary industry, and community services, to be determined based on their respective category and, within that category, the other relevant parameters including number of beds or rooms, number of staff and students, and gross floor area and/or applicable amenities.

Illustrated examples:

a) Caravan park

A caravan park has 15 cabins and 10 toilets and showers

ET code = AS01

ET units = 0.45 per cabin & 0.5 per toilet/shower

ET =  $15 * 0.45 + 10 * 0.5 = 11.7 \text{ ETs}$

## b) Hospital

A hospital has 150 beds

ET code = AM01

ET units = 0.9710 per bed

ET =  $150 * 0.9710 = 145.6$  **ETs**

## c) Medical centre

A medical centre has 5 consulting rooms

ET code = BE07

ET units = 0.6 per room

ET =  $5 * 0.6 = 3.0$  **ETs**

## d) Office

An office has been assessed as having 180 GBFA (sqM)

*GBFA = Gross Building Floor Area*

ET code = BE04

ET units = 0.006 per room

ET =  $180 * 0.006 = 1.0$  **ETs**

## e) Residential dwelling

A single property title has multiple dwellings, ie a house and a flat, or two units, or a house and a granny flat

ET code = RE01

ET units = number of dwellings<sup>2</sup>

ET =  $2 * 1 = 2.0$  **ETs**

## f) Aged care facility

An aged care facility has been assessed as having a capacity of 80 beds

ET code = AP01

ET units = number of beds 80

ET =  $80 * 0.45 = 36.0$  **ETs**

Review of Customer ET reassessment

In the event a customer believes their assessed sewerage equivalent tenement (ET) is incorrect they may apply for their ET to be reassessed. Having been contacted by a customer by phone or email, TasWater will then make contact directly to seek further documented evidence and/or organise a site visit.

It should be noted that any ET reassessment may result in an increase or decrease in ET rates. The new rates and resulting sewerage target tariffs will be applied to a customer account from the next quarterly billing period.

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<sup>2</sup> A dwelling in the form of a separate building and or auxiliary occupied building