

## 10. DENTISTRY

### 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

These activities include:

- dental surgery including X-ray and/or plaster moulds
- dental technician, and
- dental specialist (e.g. orthodontics).

They do not include dentists in dental hospitals and dental facilities attached to teaching institutions, as other liquid trade waste generating processes are typically associated with these premises deem it in a different classification of discharger. Similarly, if a dental surgery is located within a medical centre and more than four (4) trade waste streams are generated from the centre, it must be treated as different classification of discharger. There are a number of activities that may be carried out by dentists and dental technicians that produce liquid trade waste.

These include the making of fillings and teeth moulds and the processing of X-rays. The liquid trade wastes generated by these processes must be treated before being discharged to the sewerage system.

### Pre-treatment requirements

Pre-treatment requirements are dependent on the process undertaken:

- fillings – an amalgam separator is required, either built into the cuspidor by the manufacturer or separately provided. Amalgam waste must be collected by a licenced contractor
- teeth mould preparation – the liquid trade waste must pass through a plaster arrestor before being discharged into the sewerage system

X-ray processing – all silver-bearing waste must be treated in a silver recovery unit and the concentration of silver in the effluent from it must not exceed 5 mg/L. If a digital process only is used for the x-rays, a silver recovery unit is not required.

If the applicant decides not to install the required pre-treatment equipment, then the untreated wastewater must be removed from the premises and be managed in accordance with WRC trade waste requirements. The silver-bearing waste should not be discharged to the sewerage system. Discharges from dental practices may contain copper, zinc, silver and mercury in small amounts.

#### **Disposal of solid waste**

Solid wastes such as hypodermic needles, syringes, instruments, utensils, swabs, dressings, bandages, paper and plastic items of a disposable nature, or human tissues must not be discharged to the sewerage system. Such wastes are to be disposed of in accordance with the relevant authorities Management Guidelines which advise on the safe handling, storage and disposal of clinical, cytotoxic, pharmaceutical and chemical wastes.

#### **Compliance audit**

The customer must keep documentation relating to inspection and servicing of the amalgam removal equipment and to the pickup or dispatch of amalgam traps/canisters, chrome and X-ray waste (as applicable) at the premises for at least two (2) years and make this documentation available for perusal by WRC upon request.