

## 13. LABORATORY WASTES

### 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

Laboratory activities are restricted to stand-alone analytical, pathology and secondary school laboratories. They do not include laboratories that have an X-ray facility attached (such as radiology) or those that are attached to a training facility. Further, they do not include the following types of laboratories that require medium/high risk assessment.

- Agricultural research laboratory
- Pharmaceutical laboratory
- Animal health (parasitology) laboratory
- Photographic laboratory
- Autopsy laboratory
- Police crime scene unit laboratory
- Chemical (pesticides) laboratory
- Nuclear medicine and radioisotope laboratory
- Dental laboratory
- Tertiary institution laboratory
- Film (movies) laboratory
- Veterinary research laboratory
- Nuclear medicine laboratory (radiology)

- X-ray laboratory

### **Pre-treatment requirements**

A balancing pit/tank is to be installed to treat the liquid trade waste discharge, volume shall be calculated in accordance with acceptable industry standards. Infectious wastes must be sterilised by autoclaving before being discharged into the sewerage system.

The pH of the liquid trade waste is to be checked. Where it is below 6 or above 10, pH correction will need to be required before discharge to the sewerage system.

### **Chemical and solutions handling**

- Concentrated solutions should not be discharged to the sewerage system. Only rinse water used for the washing up of equipment may be discharged.
- Concentrated acids and caustic and other corrosive chemicals should not be discharged to the sewerage system.
- Chemical solutions containing small quantities of these substances should be neutralised before discharging to the sewerage system.
- Solvents should be collected and removed by an EPA licenced contractor, and must not be disposed of into the sewerage system.
- Chemical containers should be stored in such a manner that leaks or spills cannot drain to the sewerage or stormwater systems.

### **Good housekeeping practices**

Flushing with liberal quantities of water should follow the discharge of liquid trade waste from laboratory sinks. Spills and leaks should be cleaned up using dry cleaning methods.

### **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*, which advise on the safe handling, storage and disposal of clinical, cytotoxic, pharmaceutical and chemical wastes.