

 UNIVERSITY OF KWAZULU-NATAL	<p style="text-align: center;"><b>Standard Operating Procedure</b></p>  pollution research group	Effective Date:	Version:
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## Standard Operation Procedure – Faecal Sludge Disposal

### 1. Introduction

Faeces can potentially host a significant number of pathogens, and as such is classified as a biologically hazardous material. Thus, faeces cannot be disposed of as normal waste. By improperly disposing faeces into normal waste bins, personnel can potentially contract disease from any pathogens present in the samples. A sluice linked to the eThekweni sewage network has been set up in the Pollution Research Group labs to allow the safe disposal of faeces and urine.

### 2. Safety Precautions

#### General

The following general safety precautions should be taken:

- Cover any small open wounds with waterproof dressings – if large open wounds then do not carry out laboratory work.
- Always use gloves, laboratory coat and closed shoes while working in the laboratory.
- Wear a face-shield when disposing of samples down the sluice (risk of splashback).
- Dispose of samples as specified by the Faeces Sample Disposal SOP.
- Clean all soiled equipment thoroughly after use.
- Any equipment that will be taken out of the laboratory into a ‘clean’ environment should be handled only with clean gloves and disinfected using 70% ethanol spray after use.
- Dispose of the used gloves in the appropriate waste bin after sample handling and disposal and cleaning of equipment is complete.
- Clean hands using antiseptic soap.
- Disinfect hands after washing with soap.

Where mixed samples are being handled (i.e. those from field location sources such as community ablution blocks), additional care must be taken as sharps may be present in the faecal matter. Samples should not be handled directly with gloved hands, but rather with a spoon or spatula.

### **Maintain 'clean' and 'dirty' work areas**

The basement laboratory where excreta samples are processed should be considered in its entirety a 'dirty' area, however within this 'clean zones' should be designated for any items that will later be taken out of the laboratory:

- Sample boxes and equipment used to handle samples should only be placed on wipe-clean surfaces - plastic or metal top workbenches or trays.
- Any 'clean' items that will be taken out of the laboratory – e.g. camera and paper forms used to record results – should be kept on a clean tray or segregated clean area of the workbench.
- 'Clean' items should only be handled whilst wearing clean gloves.

### **3. Materials and Methods**

- Paper sheets for cleaning spilled faeces, equipment and general cleaning
- Metal/plastic spoons for scraping faeces into sluice
- 70% ethanol for disinfection of equipment, splashes and spills

### **.4. Procedure**

All faeces must be disposed of using the sluice. The procedure for the disposal follows:

- Pour unwanted faeces samples into the sluice, and scrape and excess sample from the sample container if necessary
- Flush the sluice once all sample has been disposed of into the sluice
- Clean the sluice of any unflushed faeces

- Clean all containers and equipment used with water and dishwashing detergent, and disinfect with 70% ethanol