METHOD STATEMENT

Determinand:
Procedure for Swab Samples

Matrix:
Swabs

Principle of method:
Water Utility clients may require a swab test after a Bacti failure. The client will either return to the tap of the failure and swab, or a swab sample will be taken at the time of the original sample. Testing of this swab will be triggered by a Bacti failure.

Swabs are usually analysed for Total Coliforms and *E. coli* following a filtration process. This process can also be used to test for *Clostridium perfringens,* Enterococci, *Pseudomonas aeruginosa* and TVCs.

The tip of the swab samples are washed to liberate any target organisms. The backwash is then processed according to the associated method (W1, W7, W8, W10 or W11), to determine presence of the target organism.

The backwash is typically filtered through a membrane with 0.45µm pores upon which the bacteria are retained. The filter is then placed on a selective growth medium and incubated, after which colonies characteristic of the target organism are counted and picked off for confirmation. In the context of this method, organisms that conform to the definition of a target organism within the context of the relevant method will be applicable. The confirmation procedures are detailed in the relevant laboratory method (W1, W7, W8, W10 or W11).

Sampling and Sample Preparation:
Samples should be transferred immediately to dark storage conditions and kept at a temperature between 2 - 8°C for transport to the laboratory. If samples are not analysed immediately on receipt in the laboratory, they should be kept at a temperature between 2 - 8°C, in dark conditions until analysis commences. Any delay should not exceed 24 hours.

Interferences:
High numbers of non-coliforms can inhibit the growth of target organisms (coliforms).

Performance of method:
The Limit of Detection has not been determined for this method.

References:
The Microbiology of Drinking Water 2002 – Section 4
Potable Microbiology Methods (W1, W7, W8, W10 and W11)
Bristol Water Instruction – October 2006