

METHOD STATEMENT

**Determinand:**

Salmonella spp

Matrix:

Sample Types: potable, surface and ground waters, sludges and soils.

Principle of Method:

Isolation is based on concentration from water by membrane filtration or from sludge and soil samples by dilution. This is followed by pre-enrichment involving incubation in a non-selective medium (to recover environmentally-stressed organisms) and selective enrichment with subculture to a selective agar containing lactose, an indicator of acidity and an indicator of hydrogen sulphide production. Confirmation is achieved either by protein profile identification, or biochemical and serological techniques.

Sampling and Sample Preparation:

Once taken, microbiological 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.

Interferences

High numbers of competing organisms may mask or inhibit the growth of the target organisms.

Performance of Method:**Range of Application:**

Report results as 0 (not detected) or 1 (detected)

Limit of Detection:

The limit of detection is not calculated for this method

Uncertainty of measurement:

The Uncertainty of Measurement for this method is not calculated

References:

The Microbiology of Drinking Water (2006) Part 9 - Methods for the isolation and enumeration of Salmonella and Shigella by selective enrichment, membrane filtration and multiple tube most probable number techniques. Methods for the Examination of Waters and Associated Materials. Environment Agency.

Collins and Lyne's Microbiological Methods. Eight Edition 2004. Page 149, Membrane Filter Counts.

The Microbiology of Drinking Water (2010) Part 2 - Practices and Procedures for Sampling.

The Microbiology of Recreational and Environmental Waters (2000). Methods for the Examination of Waters and Associated Methods. Environment Agency.

The Microbiology of Sewage Sludge (2004) Part 4 - Methods for the detection, isolation and enumeration of Salmonellae.