METHOD STATEMENT

Determinand:
Sulphite-reducing clostridia

Matrix:
Sample Type: Waters

Principle of Method:
A known volume of the water sample is filtered through a membrane filter with 0.45mm pores upon which the bacteria are retained. The filter is then placed on a selective growth medium containing sulphite, iron (III) and D-cycloserine (which inhibits other bacteria and reduces the size of colonies that develop) and incubated under anaerobic conditions. Black colonies may be produced as a result of the reduction of Sulphite to Sulphide which reacts with the iron(III) salt (The Microbiology of Drinking Water 2009, part 6).

Interferences:
Chlorine and chloramines. Neutralise by adding sodium thiosulphate which at a concentration of 18mgl^{-1} should counteract up to 5mgl^{-1} of free and combined residual chlorine (The Microbiology of Drinking Water 2009, part 6).

Performance of Method:
Limit of Detection,
Estimated every 5 years.
Limit of detection = the number of organisms known to be added in the inocula at the end point dilution.

Uncertainty of measurement:
Recalculated every 6 months

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