

METHOD STATEMENT



Determinand:

Escherichia coli

Matrix:

Sludge, Soil and other solids

Principle of method:

A sample of sludge is homogenised and if required serially diluted with maximum recovery diluent (MRD). After incubation for 18 - 22 hours at 37°C in an enzyme specific liquid medium the organisms are enumerated. The liquid medium is incubated in a pouch that acts as a simplified multiple tube (MPN) system, where the number of wells exhibiting growth can be counted and interpreted using the appropriate probability tables.

Interferences:

This method is suitable for most dilutions of sewage sludge, but those with particularly high turbidity may mask or impede colour development.

Performance of method:

Range of Application: 10 - 20,050,000 cfu/gram (wet weight)

Limit of Detection: 10 cfu/gram

Normal Reporting Level: <10 cfu/gram

References:

The Microbiology of Sewage Sludge (2003) - Part 3 - Methods for the isolation and enumeration of *Escherichia coli*, including verocytotoxigenic *Escherichia coli*. Environment Agency - Methods for the Examination of Waters and Associated Materials. (Downloadable pdf only - no ISBN assigned).