



METHOD STATEMENT

Determinand:

Appearance and Qualitative Taste and Odour

Matrix:

Sample Type:

Taste: Non-Regulatory Treated (potable) waters or samples known to be safe for ingestion.

Odour: Non-Regulatory Treated (potable) and raw waters.

Principle of Method:

The sample is smelled and tasted at ambient temperature and any taste or odour is assessed in terms of its intensity and nature.

The main causes for tastes and odours in water samples are: biological activity in source waters, especially algae; disinfectants used in water treatment, notably chlorine; and biological activity in distribution systems. Taste and odours may also be associated with building materials and linings, or by the leaching of industrial chemicals into supply.

The appearance of the sample is checked at ambient temperature and any variation is assessed in terms of its colour and turbidity. Some common causes for the appearance variation in water samples are the presence of dissolved organic matter, dissolved iron with iron bacteria, dissolved manganese or suspended sediments.

Sampling and Sample Preparation:

Samples should be refrigerated at $5 \pm 3^{\circ}\text{C}$ after sampling and tested within 72 hours under normal circumstances.

Samples should be collected in a 500 ml PET bottle. The bottle should be filled to the top with no headspace. The bottles should be proven to conserve and prevent transference of taste and odour. Each batch of bottles received are QC checked following GOP 7.7B before being available for use.

Interferences:

The majority of these tests are carried out in the field, at the time of sampling. Qualitative Tests required to be carried out within the Laboratory, should be carried out at the earliest opportunity after sampling in order to limit deterioration. The room in which the tests are carried out should have adequate lighting.

The test may detect any chlorinous tastes or odours. Any chlorinous Taste or Odour present may mask, or enhance, the presence of other tastes or odours.

The testing analyst should maintain a high standard of personal hygiene, but avoid using perfumes or cosmetics (including scented soap). The tester should be free from colds and allergies affecting taste and odour. Panellists should not have eaten, smoked or drunk beverages other than water for approximately an hour prior to testing.

The room in which the tests are carried out should be free from interfering odours.

Performance of Method:

Range of Application:

N/A for this method.

Results are classified according to intensity and nature.

References:

Determination of Taste and Odour in Potable Waters 1994, HMSO, ISBN 0 11 752967 2

Accreditation for Sensory Testing Laboratories NIS 91, May 1996 edition one. Publication reference EAL –G16