WMPTS-26

Water Microbiology Proficiency Testing Scheme

Scheme Description

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Scheme Aims and Organization
The primary aim of the Water Microbiology Proficiency testing scheme (WMPTS) is to enable laboratories performing the microbiological analysis of water& waste water to monitor their performance and compare it with that of their peers. WMPTS also aims to provide information to participants on technical issues and methodologies relating to microbiological testing of water& waste water. The WMPTS scheme year operates from January to December. Further information about WMPTS, including test material availability, round dispatch dates and reporting deadlines, are available on the current Contract/registration form.

Test Materials
Details of test materials available in WMPTS are given in Appendix A. The test parameters are continually reviewed to ensure they meet the needs of current laboratory testing and regulatory requirements. Test materials are tested for homogeneity. Details of homogeneity tests performed and results are given in the WMPTS Scheme Reports. The planning of the scheme, the evaluation of performance and the authorization of the final report will never be subcontracted.

Statistical Analysis
Information on the statistics used in WMPTS can be found in the General Protocol and in the Scheme Report. Methods for determining assigned values and the values for SDPA used for individual samples are given in Appendix A.

Methods
Methods are described in the general protocol. Please select the most appropriate method from the list. If none of the methods are appropriate, then please report your method as 'Other' and record a brief description in the Comments square in the reporting form.

Results and Reports
WMPTS reports will be available on the email within 14 working days of deadline. Participants will be emailed the report when it is available.

Reporting result
Results are reported on the form as a Correct number without Decimal places or Logs instead.

APPENDIX A - Description of abbreviations used

Assigned Value (AV)
The assigned value derives in the following ways:

● Consensus value from participant results: the use of a consensus value, produced in each round of the PT scheme, and based on the results obtained by the participants.

   The consensus value is usually estimated using robust statistical techniques (robust mean (R-Mean)). This is the mean of participant results after the removal of test results that are inappropriate for statistical evaluation (outlier >5 Z-score), miscalculations, transpositions and other gross errors.

   Generally, the assigned value will be set using results from all methods, unless the measurement is considered method-dependent, in such case the assigned value will be set by method and indicated in the report tables.

The uncertainty of assigned values derived in this way is estimated from the participant results, according to ISO 13528:2022.

● From a qualitative formulation (**Qual Form**). This applies to qualitative tests where the assigned value is simply based on the presence/absence of the analyte in the test material.

● **Range**: This indicates the concentration range at which the analyte may be present in the test material.

● **R-mean**: Robust mean.

● **RSD**: Robust standard deviation.

● **SDPA**: standard deviation for proficiency assessment
 Which is used to assess participant performance for the measurement of each analyte This based on the robust standard deviation of the participant measurement results, either across all methods or by method depending on whether the measurement made is method dependent.

● **Units**: This indicates the units used for the assessment of data and in which participants should report their results. For some analytes in participants may have a choice of which units to report their results.

● **DP**: Decimal places

● **NA**: Not Applicable

● **RR**: Result Rounding

Appendix A
PT Items/ water& waste water / 2026

Sample code: Sample PT-WM-01 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Total aerobic count at 35°C	All	R-mean	0 to $1*10^5$	RSD	cfu /ml	NA
Enumeration of Escherichia coli	All	R-mean	0 to $1*10^5$	RSD	cfu /100ml	NA
Enumeration of coliforms	All	R-mean	0 to $1*10^5$	RSD	cfu /100ml	NA

Sample code: Sample PT-WM-02 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of P. aeruginosa	All	R-mean	0 to $1*10^5$	RSD	cfu /100ml	NA

Sample code: Sample PT-WM-03 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of Legionella species	All	R-mean	0 to $1*10^5$	RSD	cfu /100ml	NA

Sample code: Sample PT-WM-04 (WW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of Escherichia coli	All	R-mean	0 to $1*10^8$	RSD	MPN /100ml	NA
Enumeration of coliforms	All	R-mean	0 to $1*10^8$	RSD	MPN /100ml	NA
Enumeration of Fecal coliform	All	R-mean	0 to $1*10^8$	RSD	MPN /100ml	NA

Sample code: Sample PT-WM-05 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of Enterococci	All	R-mean	0 to $1*10^5$	RSD	cfu /100ml	NA

Sample code: Sample PT-WM-06 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of Escherichia coli	All	R-mean	0 to $1*10^5$	RSD	MPN /100ml	NA
Enumeration of coliforms	All	R-mean	0 to $1*10^5$	RSD	MPN/100ml	NA

Sample code: Sample PT-WM-07 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of P. aeruginosa	All	R-mean	0 to $1*10^5$	RSD	MPN /100ml	NA

Sample code: Sample PT-WM-08 (PW)	Sample description: 1*10 ml glass vial		Instruction: to be resuscitated to final volume of 1 liter			
Test	Method	AV	Range	SDPA	Units	DP &RR
Enumeration of Enterococci	All	R-mean	0 to $1*10^5$	RSD	MPN /100ml	NA

PW: potable water   , WW: wastewater