29 September 2025

To: Laboratories participating in Proftest Syke proficiency tests

Proficiency test WW 11/2025 – Wastewater analyses II

Proftest Syke will organise a proficiency test (PT) for the analysis of chloride, colour, conductivity, nutrients (N_{NH4}, $N_{NO2+NO3}$, N_{tot}, P_{PO4}, P_{tot}), pH, and sulphate in wastewaters.

The purpose of this proficiency test is to ensure the comparability and accuracy of the results of the participants. About 50 laboratories are expected to participate in this proficiency test. The measurands and samples of this proficiency test are included in the Water chemistry scheme of the Proftest Syke accreditation scope (finas.fi/sites/en).

Sample matrices

Synthetic sample, pulp and paper industrial wastewater, and municipal wastewater.

Timetable

Registration	**29 September – 27 October 2025**	
Sample dispatch date (national participants)	25 November 2025 (see Chapter *4 Sample delivery)*	
Analysis of the samples	N_{NH4}, $N_{NO2+NO3}$, P_{PO4}	27 November 2025
	pH, conductivity	27 November 2025
	Colour	27 November 2025
	Cl, SO_4	at the latest on 8 December 2025
	N_{tot}, P_{tot}	at the latest on 8 December 2025
Reporting the participant results	**26 November – 8 December 2025**	

Participation fee

The participation fee is **847 €** (+ VAT) including all measurements and samples.
See detailed information in Chapter 9 *Participation fee.*

Päivi Grönroos,
Coordinator

Mirja Leivuori,
Group manager

Proftest Syke is proficiency testing provider PT01 (EN ISO/IEC 17043:2010) accredited by FINAS (Finnish Accreditation Service, finas.fi/sites/en).

Proftest Syke guide for participants is available on Proftest Syke website (syke.fi/proftest/en).

ProftestWEB is the electronic client interface for Proftest Syke proficiency tests wwwp5.ymparisto.fi/Labtest/en. Within the pages, instructions are available on every page. A short *Getting started* manual is available on ProftestWEB front page.

Organising the proficiency test

1 Organiser

Proftest Syke, Finnish Environment Institute Syke
Address: Mustialankatu 3, FI-00790 Helsinki, Finland
Email: proftest@syke.fi

Contact

Coordinator: Päivi Grönroos, tel. +358 295 252 174
Substitutes for coordinator: Mervi Pajula, tel. +358 295 252 320
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Technical assistance: proftest@syke.fi

Analytical experts

Mika Sarkkinen (Syke), tel. +358 295 251 620

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Expert laboratory Finnish Environment Institute, Oulu (T003, finas.fi/sites/en)

2 Sample and measurands

The sample matrices in this proficiency test are: synthetic sample, pulp and paper industrial wastewater, and municipal wastewater. Samples, measurands, concentration ranges and sample preservations are presented in Appendix 1.

Note! Check the samples volumes and, in case needed, order additional samples.

3 Registration

The registration for this proficiency test is open until **27 October 2025**.

Registration is done via the electronic client interface, ProftestWEB: wwwp5.ymparisto.fi/Labtest/en. If there are problems when using ProftestWEB or you need username and password, please contact proftest@syke.fi.

4 Sample delivery

The sample dispatch day for national participants is **25 November 2025**. To ensure timely arrival, the samples are dispatched earlier for participants abroad.

If the sample package does not arrive **at the latest on 26 November 2025**, or there are missing and/or broken sample containers, please contact the provider immediately (proftest@syke.fi). More contact details in Chapter 1 *Organiser*.

5 Sample storage and analysis

The samples are stored at 4 °C and they are stabilised to room temperature before analysis.

Note! Conductivity samples are either analysed at a temperature of 25 °C or the results are reported as a value corresponding to a temperature of 25 °C.

The samples are analysed within the laboratory where they are delivered to, and analyses are conducted according to the participant's normal procedures.

Replicated analysis should be done no more than according to the method of analysis or the instructions within the sample letter.

Timetable for sample analysis is on the first page of this letter.

6 Reporting the results

The participant results are reported to Proftest Syke at the latest on **8 December 2025**.

Proftest Syke delivers the preliminary results report to the participants latest in the week 51 (15 – 19 December 2025). The final report will be published at the latest in June 2026 and it is then available on ProftestWEB and on Proftest Syke website (syke.fi/proftest/en). The availability of the report will be informed to the participants.

7 Assigned values and evaluation of the results

Either the calculated concentration (synthetic samples) or the robust mean, the median, or the mean of the results reported by the participants will be used as the assigned value for the measurand. The calculation of the assigned value is based on the results reported according to the given guidelines. Also, when needed, the result of the expert laboratory can be used as the assigned value. The evaluation of the results will be based on z scores. The preliminary standard deviation for proficiency assessment will be given in the cover letter of the sample. In special cases also E_n or D% scores can be used for the performance evaluation.

8 Confidentiality

The results of participants are treated anonymously. The participants' results and the preliminary results report of the round are confidential and should not be shared with third parties during the implementation of the round.

9 Participation fee

The participation fee is **847 €** (+ VAT) including all measurements and samples. The basic fee is **460 €** (+ VAT) and the fees for each sample and measurand are as follows:

Chloride, sulphate	20 €/sample	(3 samples)
Colour	20 €/sample	(3 samples)
N compounds	41 €/sample	(3 samples)
P compounds	28 €/ sample	(3 samples)
pH, conductivity	15 €/ sample	(4 samples)

The invoice will be sent after the delivery of the preliminary result report. If the participant orders additional samples, they are charged according to the prices listed above.

Note! In Finland VAT is 25,5 %. Further, if the invoicing address or any other additional information has to be corrected after the invoicing, the extra handling cost will be charged. The participant is also responsible for possible custom clearance or customs fee of the sample.

10 Appendices

Appendix 1 Samples, measurands, concentration ranges and preservations.

Appendix 1. Samples, measurands, concentration ranges and preservations.

Measurands	Sample matrix	Sample code	Sample volume [1], container and *preservation*	Concentration range
Chloride, sulphate	Synthetic sample	**A1S**	500 ml, plastic *Not preserved at Syke.*	5 – 500 mg/l
	Pulp and paper industry wastewater	**P2S**		
	Municipal wastewater	**V3S**		
Colour	Synthetic sample	**A1V**	250 ml, plastic *Not preserved at Syke.*	10 – 500 mg/l, Pt
	Pulp and paper industry wastewater	**P2V**		
	Municipal wastewater	**V3V**		
Conductivity 25℃	Synthetic sample	**A1H**	100 ml, glass *Not preserved at Syke.*	2 – 800 mS/m
	Pulp and paper industry wastewater	**P2H**		
	Municipal wastewater	**V3H**		
N_{NH4}	Synthetic sample	**A1N**	app. 400 ml, glass *Autoclaved at Syke.*	> 0.5 mg/l
	Municipal wastewater	**V3N**	500 ml, plastic *Autoclaved at Syke.*	
$N_{NO2+NO3}$	Synthetic sample	**A1N**	app. 400 ml, glass *Autoclaved at Syke.*	> 0.5 mg/l
	Municipal wastewater	**V3N**	500 ml, plastic *Autoclaved at Syke.*	
N_{tot}	Synthetic sample	**A1N**	app. 400 ml, glass *Autoclaved at Syke.*	> 1 mg/l
	Pulp and paper industry wastewater	**P2N**	500 ml, plastic *Autoclaved at Syke.*	> 1 mg/l
	Municipal wastewater	**V3N**	500 ml, plastic *Autoclaved at Syke.*	> 2 mg/l
P_{PO4}	Synthetic sample	**A1P**	250 ml, plastic *Not preserved at Syke.*	> 0.05 mg/l
	Municipal wastewater	**V3P**	250 ml, plastic *Autoclaved at Syke.*	
P_{tot}	Synthetic sample	**A1P**	250 ml, plastic *Not preserved at Syke.*	> 0.05 mg/l
	Pulp and paper industry wastewater	**P2P**	250 ml, plastic *Autoclaved at Syke.*	
	Municipal wastewater	**V3P**		
pH	Synthetic sample	**A1H**	100 ml, glass *Not preserved at Syke.*	4 – 9 pH unit
	Pulp and paper industry wastewater	**P2H**		
	Municipal wastewater	**V3H**		

[1] Please check the sample volume and, in case needed, order additional samples.

Sample codes (first letter showing sample matrix):
A = Synthetic sample
P = Pulp and paper industrial wastewater
V = Municipal wastewater