WATER RESEARCH INSTITUTE



Slovak National Water Reference Laboratory

Accredited by Slovak National Accreditation Service for testing (Reg. No. 059/S-100) and for providing Proficiency Testing Schemes (Reg. No. 059/T-005) Nábr. arm. gen. L. Svobodu 5, 812 49 Bratislava, Slovak Republic

Work Instructions for Participants MPS-SAA-4/2017

Proficiency testing (PT) samples to be analyzed according your routine laboratory practice, unless otherwise stated in the instructions.

Some parameters are available in several concentrations, therefore, **always report the identification number on samples in the results data form** (listed next to the name of parameter). If it is impossible to state the number (due to some technical issues, e.g. the label was soaked and unreadable), note this problem in the comments section of results data form.

The samples are prepared on concentration levels of drinking/surface water. The samples should be stored in dark at temperature 1-5 °C. Before the determination of the samples should be at laboratory temperature.

- 1. **Synthetic samples concentrates of AI, Fe+Mn** are delivered in 20 ml HDPE containers. The solution is preserved with nitric acid (app 0,5 % v/v). Before the determination of the sample should be diluted **100 times** (e.g. 1 part of sample + 99 parts of water), while in the final calculation of the concentration, the blank must be included. **Results should be reported for the diluted solution.**
- 2. Synthetic samples mixture of elements for determination of As, Cd, Co, Cr, Cu, Ni, Pb and Zn are delivered in a 125 ml LDPE container. Solution is preserved with nitric acid (app 1 % v/v). Results should be reported for the not diluted solution.
- 3. Synthetic samples for determination of Ag are delivered in 100 ml dark glass containers. The solutions are preserved with nitric acid (app 1 % v/v). Do not dilute these samples. Results should be reported for the not diluted solution.
- 4. **Synthetic sample** for determination **Hg** is delivered in 100 ml dark glass containers. The solutions are preserved with nitric acid (app 0,5 % v/v) with addition of potassium dichromate (0.005% m/v). **This sample should be analyzed till 14**th **April 2017.** Before the determination of the sample should be diluted **100 times** (e.g. 1 part of sample + 99 parts of water), while in the final calculation of the concentration, the blank must be included. **Results should be reported for the diluted solution.**
- 5. Concentration ranges:

Range	Parameter		
(0,01 – 10) μg/l	Cd, Hg		
(10 - 100) μg/l	Ag, As, Co, Cr, Cu, Ni, Pb		
(100 - 1000) μg/l	Al, Fe, Mn, Zn		

For reporting your results use the enclosed Data Report Form. Send results to WRI to the responsible person (Dr. Angelika Kassai or Dr. Jana Tkacova). State the results unambiguously (the result of one method, one device and one worker) with the required rounding.

Round results according to the following table:

Concentrations	0,01 – 9,99	10,0 - 99,9	100 – 999
Rounding of results	0,01	0,1	1

Values below LOQ will not be included in the evaluation.

- 7. **Mark clearly the method of determination** indicate the code of the method according to the attached list. In case of using other method, please indicate in the table a brief description of the method.
- 8. For all parameters report results with expanded uncertainty *U* using proper units. These data have no impact on the evaluation your results.
- Deadline for reporting results is 2nd May 2017 (by mail). We ask you to meet deadlines for processing samples and sending the results! Always state the registration number (93.01 for your laboratory).

WATER RESEARCH INSTITUTE



Slovak National Water Reference Laboratory

Accredited by Slovak National Accreditation Service for testing (Reg. No. 059/S-100) and for providing Proficiency Testing Schemes (Reg. No. 059/T-005) Nábr. arm. gen. L. Svobodu 5, 812 49 Bratislava, Slovak Republic

Change and correction record (entry in the results) in the Data Report Form must meet the requirements specified in EN ISO/IEC 17043:2010, 5.13.2.3. Correct change and correction of record (the results) means that the original record is not bleached, but crossed out and written next to the new record. Changes must be marked with the date when the change was made and legible signature of the person who carried out the change. Otherwise these the changes will not be accepted.

- 10. Results sent late will not be included into the evaluation!!!
- 11. Reference values will be mailed by 6th June 2017.
- 12. The cost for the ordered samples will be invoiced according to the rates.
- 13. **The certificate and final report** will be mailed by **27**th **July 2017** only after the invoices have been paid!
- 14. **In case of any problems** with this ICT do not hesitate **to contact us** by mail: angelika.kassai@vuvh.sk or jana.tkacova@vuvh.sk
- 15. Update information will be provided in time on the website of WRI www.vuvh.sk.

Overview MPS-SAA-4/2017 dates:

Sending registration:	3 rd March 2017
Send/ deliver the samples:	11 th April 2017
Sending results - deadline:	2 nd May 2017
Reference values - sended by e-mail:	6 th June 2017
Final report:	27 th July 2017