

Directorate D - Institute for Reference Materials and Measurements **European Union Reference Laboratory for Heavy Metals** 

23.09.2015

## Work Programme 2016-2017 of the EURL for Heavy Metals in Feed and Food

Overview of the major objectives for the period January 2016 - December 2017

The following activities will be carried out:

Organisation of the proficiency test EURL-HM-22 for the determination of heavy metals in fish (Deadline: September 2016), and report on the organisation and outcome of the mentioned proficiency test (Deadline: November 2016) (\*,\*\*)

Matrix:1 Fish

Analytes: total As, Hg, Cd, Pb, MetHg and iAs (\*\*\*)

To monitor and maintain appropriate levels of proficiency in NRLs, specifically for the determination of mercury and methyl mercury in fish <sup>(#)</sup>.

Organisation of the proficiency test EURL-HM-23 for the determination of heavy metals in palm kernel expeller (Deadline: September 2016), and report on the organisation and outcome of the mentioned proficiency test (Deadline: November 2016) (\*,\*\*)

Matrix: 1

Palm kernel expeller

Analytes: total As, Cd, Hg, Pb and iAs (\*\*\*)

To monitor and maintain appropriate levels of proficiency in NRLs, specifically for the determination of arsenic in palm kernel expeller – subject of several RASFF alerts in 2011 <sup>(#)</sup>.

Organisation of the proficiency test EURL-HM-24 for the determination of heavy metals in tea (or another food matrix of non-animal origin to be discussed with the NRLs during the EURL-HM WS, Brussels 28-29/09/2015 and to be agreed with the DG SANTE desk officer) (Deadline: September 2017), and report on the organisation and outcome of the mentioned proficiency test (Deadline: November 2017) (\*,\*\*)

Matrix: 1

tea (or another matrix agreed with the SANTE/)

Analytes: total As, Cd, Pb, Hg and iAs (\*\*\*) to be confirmed

To monitor and maintain appropriate levels of proficiency in NRLs, specifically for the determination of (arsenic, cadmium mercury and lead in tea; or other matrix)

This PT is meant to support the future enforcement of established arsenic, cadmium mercury and lead levels in tea in the EU legislation <sup>(#)</sup>.

4. Organisation of the <u>proficiency test</u> EURL-HM-25 for the determination of **heavy metals** in a feed matrix (to be discussed with the NRLs during the EURL-HM WS, Brussels 28-29/09/2015 and to be agreed with the DG SANTE desk officer) (Deadline: September 2017), and report on the organisation and outcome of the mentioned proficiency test (Deadline: November 2017) (\*,\*\*\*)

Matrix: 1

feed matrix (to be agreed with the SANTE)

Analytes: total As, Cd, Pb and iAs (\*\*\*) to be confirmed

To monitor and maintain appropriate levels of proficiency in NRLs, specifically for the determination of arsenic, cadmium and lead in feed (#).

- \* Subcontracting foreseen for activities 1 to 4:

  The analytical measurements for the evaluation of homogeneity and stability of the test item will be subcontracted, for each analyte investigated.
- \*\* In case the outcome of the exercise shows some scientific interest, a manuscript will be submitted to a peer-reviewed journal.
- Participants will be requested to determine the analytes listed in the various food and feed matrices. However, the endogenous concentration of some analytes is expected to be low and may be below the analytical limit of detection for many of the participating NRLs. No z-score will then be calculated for results reported as "less than".
- # All PTs will be organised under accreditation according to ISO 17043 for the network of NRLs. EU official food and feed control laboratories will get the possibility to participate in the study on a participation fee basis. The influence of the applied methods of analysis will be evaluated. A report to participants will be made published on the EURL-HM website and on the CIRCABC platform after evaluation of the reported results. The organisation of the PT comprises the preparation of the test material, packaging, homogeneity, and stability testing of the test material. The homogeneity of the test material will be demonstrated by means of ANOVA, with a method for which in-house method performance has been established. The stability of the material during the execution of the exercise will be studied as well.
- 5. Follow-up of results reported by underperforming NRLs in the two PTs organised in 2015. This implies: the review of root-cause analyses submitted by the NRL, and the evaluation of improvements actions implemented and their effectiveness. Report to SANTE (Deadline September 2016).
- 6. Follow-up of results reported by underperforming NRLs in the two PTs organised in 2016. This implies: the review of root-cause analyses submitted by the NRL, and the evaluation of improvements actions implemented and their effectiveness. Report to SANTE (Deadline September 2017).
- 7. Organisation of the 11<sup>th</sup> Workshop of the EURL-HM with participation of National Reference Laboratories (September 2016) and report on this activity and its outcome (Deadline October 2016). The proceedings of the workshop will be made available on the EURL-HM website at the latest two months after the event.

- 8. Organisation of the 12<sup>th</sup> Workshop of the EURL-HM with participation of National Reference Laboratories (September 2017) and report on this activity and its outcome (Deadline October 2017). The proceedings of the workshop will be made available on the EURL-HM website at the latest two months after the event.
- 9. Maintenance of the CIRCABC knowledge sharing platform for the NRLs (Deadline: December 2017).
- 10. Providing support to NRLs when requested (Deadline: December 2017).
- 11. Providing support to DG SANTE, which implies the management of the EURL-HM and the support on technical matters related to heavy metals analysis, including the participation in the Working Groups of National Experts on Industrial Contaminants and on Analytical Methods (Deadline: December 2017).
- 12. Providing support to standardisation bodies such as CEN for the harmonisation of analytical methods for the determination of heavy metals in food and feed. This will require a regular participation in the meetings of CEN TC 275/WG 10 (Elements and their Chemical Species in Food) and CEN TC 327/WG 4 (Heavy Metals, Trace Elements and Minerals in Feed) (Deadline: December 2017).
- 13. Collaborate with the EURL for Chemical Elements in Food of Animal Origin (EURL-CEFAO), which includes participation to their annual workshops in Rome (Deadline: November 2017).
- 14. Providing support to EFSA on technical matters related to heavy metals analysis, which might imply participation to meetings of the relevant EFSA working groups (Deadline: December 2017).
- 15. Organisation of ad-hoc expert meetings (one per year) if requested of DG SANTE.