Summary – GMP1 and GMP 2

Interlaboratory assessments of POPs laboratories

- UNEP-coordinated interlaboratory assessments of POPs laboratories successful since ten years;
- Acceptance and participation goes far beyond the GMP idea; objective tool for QA/QC;
- Recommendation: Successful participation every two years, POP- and matrix-specific required.

Lab equipment, lab materials, training

- Whereas instrumentation may play an important role (capillary GC; mass-selective detectors),
- Whereas good quality lab materials are essential (internal standards, solvents, auxiliary instrumentation);
- Good quality data can only be delivered if there is trained and experienced staff and certain routines present (includes dedicated lab space; several hundred samplers *per* year on matrix of interest);

Core matrix “air”

- Important information has been generated in certain UN regions by the use of passive air samplers and PUFs;
- PAS/PUFs suitable to follow trends on-site; easy to handle; Analysis can be a challenge;
- PFOS precursors not analyzed in PAS/PUFs (with LC/MS-MS);
- Most data from networks other than UNEP (calibrations with active samplers still underway).

Core matrix “water”

- Added because of listing of PFOS in 2009; new PFAS (PFOA and PFHxS) also high relevance for water Not for chlorinated or brominated POPs;
- Indicative initial data show the presence of PFOS and PFOA, PFHxS seems to be lower, in all countries;
- Promising and easy-to-handle tool; robust analytical methods;
- Suitable for background sites? More interesting for potential hotspots?

Core matric “human milk”

- Human milk powerful and cost-efficient tool to follow impact of POPs to humans over time, between POPs within a country and between countries;
- Information about human exposure in one sample;
- Only moderate efforts needed (5-year intervals) and one/two central laboratory.