

### (i) Sampling and analysis

For accurate verification of the declarations all analytical tasks - monitoring of known compounds, monitoring of compounds for structure elucidation, unambiguous identification, structure elucidation and semiquantification - may have to be performed. To achieve this the following instruments can be used:

- two-channel GC with retention index monitoring, GC-MS or GC-FTIR for monitoring of known chemicals,
- GC equipped with element specific detection, e.g. atomic emission spectrometry for monitoring of compounds for structure elucidation,
- GC-MS or GC-FTIR for unambiguous identification,
- HRMS, FTIR and NMR for structure elucidation. This cannot be done on-site.
- Any of the above instruments for semiquantification.

However, the appropriate methods may be determined in the facility agreements according to the tasks involved, including the off-site analysis.

### (ii) Process monitoring

The rolling text provides for the possibility for process monitoring. The need to use it should be decided individually for each facility and be agreed in the facility agreement as the nature of the facilities may differ considerably.

Continuous monitoring can also be achieved by controlling variables not directly connected with the process, such as the water supply and electricity, to reveal intensive production.

If there will be 100 litre reactors, continuous monitoring of the reactors may be considered necessary. For the smaller reactors the possibility for frequent rearrangement of the configuration makes process monitoring very complicated and easily circumvented.