Marine Licensing Team, Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH
Tel: 0300 123 1032
Fax: 0191 376 2681
Email: marine.consents@marinemanagement.org.uk

Filling out this form
You must complete this form electronically and submit it before you apply for a marine licence.

Marine licensing: Sampling and sediment analysis – Methodological statement

This methodological statement should be completed by laboratories providing data for marine licence applications. A separate statement should be completed for each category (see question 1) where necessary.

Relevant information related to these requirements should be attached. Separate statements should also be provided where methods differ within the categories (see question 1).

Methodologies and associated quality control or performance characteristics must meet the requirements detailed in the detailed guidance for laboratories for analysis outputs to be accepted in support of a marine licence application.

If tests are subcontracted, the subcontractor must submit this statement for the analyses they perform.

Under section 89 of the Marine and Coastal Access Act 2009 it is an offence to make a false or misleading statement for the purposes of obtaining a marine licence or variation or transfer of a marine licence.

Section A: General analysis information

1. Category of test

- ◯ Particle size analysis
- ◯ Total organic carbon
- ◯ Trace metals
- ◯ Organotins
- ◯ Total hydrocarbon content or polycyclic aromatic hydrocarbons
- ◯ Polychlorinated biphenyls
- ◯ Organochlorine pesticides
- ◯ Brominated flame retardants

2. Provide a brief description of the methods used including sample storage, pre-treatment, extraction, clean-up and detection methods – sediment analysis methodologies must comply with any relevant specific requirements in the detailed laboratory guidance for analysis outputs to be accepted in support of a marine licence application.

Where methods have been used exactly as previously validated for other marine licence applications please state this and include a marine licence reference number.

3. Does your laboratory routinely use these methods? ◯ Yes ◯ No

4. If yes, please indicate depth of experience – such as years analysing and frequency of samples.

5. If the method is a standard method, provide citations where relevant.

6. Is the method accredited – such as included in the scope of ISO 17025 accreditation? ◯ Yes ◯ No

7. Has the method been validated externally by collaborative trial or internally through in-house protocols?
◯ Yes – externally ◯ Yes – internally ◯ Yes – both ◯ No

8. Has analysis been performed on less than 2mm sediment fraction for polychlorinated biphenyls, organochlorine pesticides, or flame retardants? ◯ Yes ◯ No ◯ Not applicable

9. Has analysis been performed on total sediments for metals, organotins, polycyclic aromatic hydrocarbons, or total hydrocarbon? ◯ Yes ◯ No ◯ Not applicable

10. Has analysis been performed on wet sediments for polycyclic aromatic hydrocarbons or total hydrocarbon? ◯ Yes ◯ No ◯ Not applicable

Section B: Quality control and performance characteristics

Performance characteristics or quality control must meet minimum requirements in the detailed guidance for laboratories.

11. Are control reference materials, such as certified reference materials (CRMs), in-house reference materials (IHRMs), and procedural blanks, used in an analytical run? ◯ Yes ◯ No

12. Provide details of which CRMs are used, how they are used and at what concentrations. How often are CRMs incorporated into the analytical run?

13. How are new control materials and calibration standards checked?

14. Do you use control charts compiled based upon data resulting from the analyses of the reference materials and use these to monitor analytical performance in relation to all samples? MMO may request these charts in support of the submitted data. ◯ Yes ◯ No

15. What action and warning limits apply for control charts? What procedures are followed if limits are exceeded?

16. How frequently are blanks incorporate into the analytical run?

17. What limits or criteria are applied for reagent blanks and what procedures are followed if reagent blank limits or criteria are exceeded?

18. Summarise the limits of quantification and the limits of detection that are achieved by the methods.

19. What methods are used to determine the limits of quantification and limits of detection?

22. Detail the intermediate precision of the methods as values over a relevant concentration range expressed as relative standard deviations.

23. Provide the accuracy determined using the CRM as appropriate indicating the relevant concentration range to which this relates.

24. Provide a measurement of uncertainty (MU) at or below relevant Action Levels. The MU can be derived from relevant control charts using the most recent data (ideally 30 data points or more) applying the following calculation (where RSD = relative standard deviation):

MU = 2 x %RSD

Please indicate the number of data points used for the MU calculation.