AdlerandAllan Group
Quality Manual
Procedure – CL5 Surface Water Sampling

PROCEDURE:

1.0 OBJECTIVE
Obtain representative surface water samples from rivers and streams for physical and chemical assessments.

2.0 SCOPE
Applies to sampling location, techniques and handling of water samples from rivers and streams. It is not applicable for estuarine, coastal waters or for microbiological sampling.

3.0 REFERENCES
- BS ISO 5667-6:2014. *Part 6: Guidance on sampling of rivers and streams*

4.0 RESPONSIBILITIES
The document owner, senior management and delegated personnel assigned with maintaining manual or electronic group documentation including the distribution and communication of documents to personnel. Environmental Technicians and Consultants are required to feedback suggestions for improvements.

5.0 REQUIREMENTS OF PROCEDURE

5.1 Selection of Surface water monitoring point
The project manager must consider the following in the selection of surface water monitoring points:
- The appropriateness of the sampling point to meet monitoring objectives e.g. consideration of the conceptual site model travel time from the spill point if contaminated baseflow is an issue, effects of dilution etc.
- The measurements to be made (physical, chemical or biological sampling)
- Sampling method – single (discrete) samples or sampling from specific depths
- Accessibility and safety of monitoring point
- The project manager should ensure that clear site specific instructions are given to the task manager in a written work instruction.

5.2 Equipment Required
- Telescopic open water sampler with appropriate attachment.
- Sample container as required by sampling suite (CL6)
- Chain of Custody Sheet
- Site Observation Record Sheet

5.3 Preparation for Sampling
- A precise description of and documentation of sampling point (e.g. site plan)
- The type of sample required for laboratory analysis.
- Sampling order to begin at the monitoring point with the least contamination, generally located down-stream or furthest from the site or suspected source. Then proceed systematically towards the monitoring points with the most contaminated surface water. CLEAN TO DIRTY

5.4 Sampling from Bridges

1. Use the telescopic open water sampler with preferably the laboratory supplied bottle held in the holder or if not possible use the stainless steel container attachment.
2. The collection container should be submerged in the main flow of the river channel, preferably upstream of the bridge around 30cm under the surface. The water sample should be collected from the homogenous zone in such a way as to avoid including the surface film and avoid eddy water caused by the bridge abutments that can aerate the water, thereby biasing certain measurements.

Note – If using the stainless steel container rinse with the surface water at each location prior to taking the sample.

3. Record site observations on surface water sample record sheet (F4)

5.5 Sampling from the Bankside

1. When sampling from the bank side, care should be taken to avoid sample contamination by disturbance of either the bed or the bank of the watercourse.
2. Use the telescopic open water sampler with preferably the laboratory supplied bottle held in the holder or if not possible use the stainless steel container attachment.

Note – If using the stainless steel container rinse with the surface water at each location prior to taking the sample.

3. The collection container should be submerged in the main flow of the river channel, preferably upstream of the bridge around 30cm under the surface avoiding any surface film or eddy water.
4. Record site observations on surface water sample record sheet (F4)

5.6 Sampling of surface layers for LNAPL

1. Use the telescopic open water sampler with the stainless steel container attachment
2. The stainless steel container should be placed at the surface to collect the sample.

5.7 Decontamination of equipment

1. Clean down equipment as per procedure CL10

6.0 RELATED PROCEDURES

- CL6 – Laboratory Analysis Suites
- CL10 - Decontamination

PROCEDURE AUTHORISATION	AUTHORISED BY: COMPLIANCE DIRECTOR	AUTHORISED BY: IMS & COMMERCIAL MANAGER