



Envirolab QA/QC Requirements and Temperature Monitoring of Samples on Receipt at the Laboratory (NEPM Sch B3 May 2013)

QA/QC Requirements

Envirolab are now being proactive in highlighting areas where sample volumes supplied are insufficient to allow for Duplicate and Spike sample analysis. This is a particular concern in the area of VOC and SVOC analysis of water samples.

Envirolab acknowledges the difficulty in some circumstances in providing certain volumes of water samples due to slow recharge groundwater wells for example. Additionally, the freight costs involved in moving extra sample volumes can be onerous, particularly from remote locations.

Therefore, Envirolab will supply extra containers for at least three samples in every twenty supplied to cover our QA/QC requirements (based on NEPM Schedule B3/USEPA protocols).

The requirements for duplicate and sample spike analysis are as follows:-

VOC QC – three VOC vials, one for primary analysis, one for dilutions/reruns as required and one for duplicate or spike analysis. Therefore please fill an extra 1 in 10 vials for VOC for duplicate analysis and an extra 1 in 20 for a spike sample. Note some samples may not be amenable to spike addition due to the nature of the matrix. A suitable duplicate should be chosen.

SVOC QC – An additional amber bottle is required in order for duplicate or spike analysis to be analysed. Therefore please fill an extra 1 in 10 amber bottle for SVOC for duplicate analysis and an extra 1 in 20 for a spike sample. Note some samples may not be amenable to spike addition due to the nature of the matrix. A suitable duplicate should be chosen.

Hence Envirolab Group certificates of analysis will contain the caveat:-*"In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient."* in cases where an extra container of sample has NOT been provided.

Temperature Monitoring of Samples on Receipt at the Laboratory

NEPM B3 requires that sample container temperature is recorded on receipt at the laboratory (4.5.1). The temperature is recorded on the sample receipt notification as described below:-

"Samples should be sealed and transported to the laboratory as soon as practicable, using suitable cooling aids (preferably ice bricks or in a refrigerated container) to ensure samples start cooling as soon as possible, and they should be stored in a refrigerator ($\leq 6^{\circ}\text{C}$) until analysis.

Upon receipt of sample, laboratories should issue a Sample Receipt Report detailing the condition of samples, including temperature upon receipt (recorded and reported per individual sample delivery container) and sample preservation status, and chain-of-custody details."

Note, NEPM B3 no longer requires samples to be received at the Laboratory at 4°C . As long as the client has attempted to cool their samples below ambient then they are NEPM compliant.

However, we recommend that your samples are cooled as quickly as possible after sampling. This is done preferably with loose ice to lower the initial temperature quickly, then transported to the lab with either ice bricks or bagged ice.

FOR FURTHER INFORMATION AND TECHNICAL ASSISTANCE CONTACT YOUR LOCAL LABORATORY OR OFFICE ON
1300 42 43 44 or www.envirolab.com.au OR www.mpl.com.au