

## Sample Preservation, Pretreatment and Analysis:

What do we really need to do?

Bob Litman



There is an old adage that goes something like, “If the sampling process is inadequate, don’t bother to analyze the sample”. Most facility personnel who perform sampling (or who have it contracted out) rely on what has been done for many years as being correct.

But are these processes correct-and-up to date? Has anything changed in the plant or at field sampling locations that requires adjustment to the sampling process?

What has the laboratory been instructed to analyze for, and do they know enough about the sample composition to ensure that the correct method will be used (what, there is more than one method)?

What determines radionuclide detection? Who decides what that equation is for detection?

Should there be requirements for processing time, yield, uncertainty, duplicates and spikes (and which samples they are done to)?

This presentation will review some of the fundamental aspects of sampling, sample preservation, shipping, containers, direction to the contract laboratory, the analytical process itself and the interpretation of data with respect to samples taken for the RETS and REMP.