PARTNERING AS A TOOL FOR IMPROVING ANALYTICAL LABORATORY PERFORMANCE IN ENVIRONMENTAL MONITORING

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Westinghouse Savannah River Company (WSRC) contracted several laboratories in 1994 to conduct 175,000 organic, inorganic, and radiological analyses on samples collected from 1,500 monitoring wells. WSRC's responsibility is to ensure that each laboratory provides reliable and comparable analytical results.

A WSRC team developed a Quality Assessment Program (QAP) for monitoring the performance of subcontracted laboratories. The program uses three types of evaluations. The first is an evaluation of quality control samples sent quarterly to each lab. The second type involves Mean Relative Difference (MRD) statistics that identify intralaboratory differences of replicates vs. blinds and interlaboratory differences of split samples. The third type is an on-site performance evaluation of laboratory facilities and operations.

The presentation will address examples of a success story in which MRD statistics are used to identify quality problems and to measure the effectiveness of corrective action through a partnering relationship developed with the subcontractor laboratories. This effort resulted in a reduction in the level of volatile organic contamination and in the resolution of several methodology problems during groundwater monitoring analysis, which saved costly cleanup efforts.

The presentation will demonstrate that high-quality analytical services can be obtained cost-effectively through a strong partnership.