

**CLARIFICATION****SELECTIVE ION MONITORING (SIM) ANALYSIS: QUALITY ASSURANCE/CONTROL REQUIREMENTS**

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**INTRODUCTION**

Currently, the laboratories have been allowed to use best professional judgment to select the most appropriate analytical methods (from among the accepted PSEP protocols) to achieve limits of detection less than PSDDA SIs.

**PROBLEM IDENTIFICATION**

PSDDA agencies have recommended the use of the dual column gas chromatographic method for analysis of certain organic COCs in sediments because it has been found to be more appropriate or sensitive than the Selective Ion Monitoring method (SIM) (A-3). However, some laboratories have the capabilities and expertise to successfully use the SIM method, in many cases achieving appropriate detection levels. Evidence of the presence of other chemicals not currently on the PSDDA list of "chemicals of concern", normally obtained with QA2 information, is lacking from SIM analysis.

**PROPOSED ACTION/MODIFICATION**

PSDDA agencies propose allowing use of SIM methodology for analyzing sediment organic COCs, provided that a) all screening levels equal or exceed sample limits of detection, and b) quality assurance information is provided which demonstrates whether or not non-PSDDA organic chemicals of concern are present in large concentrations. The latter means, from a practical standpoint, that a screening method, e.g., gas chromatographic organics scan, must also be run and the resulting raw data package be submitted along with the results and QA information from SIM analysis.

**REFERENCES**

A-3 Memorandum for Record. U.S. Army Corps of Engineers, Seattle District, March 1991. Summary and Conclusions of the PSDDA Chemistry QA/QC Workshop January 24, 1991).