



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

DATE: 17 December 2007

FROM: Barry Lesnik, RCRA National Organic Methods Program Manager, Office of Solid Waste (5307P)

TO: SW-846 Organic Methods Workgroup

SUBJECT: Clarification of Section 9.4.1 of Method 8000C

Recently, it has been brought to our attention that there is an inconsistency in the recommended use of standards for the Initial Demonstration of Capability between Method 8000C and Methods 8260C and 8270D. This memorandum is intended to eliminate this inconsistency which is due to the much earlier publication date of Method 8000C than of the two GC/MS methods. Following is the clarification which will be included in the next version of Method 8000C which will be published as Method 8000 in the Fourth Edition of SW-846.

Method 8000C of SW846, "Determinative Chromatographic Separations," which provides guidance on chromatographic analysis states the following regarding the Initial Demonstration of Capability.

9.4.1 The reference sample concentrate (spiking solution) may be prepared from pure standard materials, or purchased as certified solutions. If prepared by the laboratory, the reference sample concentrate must be made using stock standards prepared independently from those used for calibration.

It is not intended that a Demonstration of Capability include the uncertainty from standard solution preparation but to assure that where a concentrate is prepared from pure standards, the validity is checked with a standard from an independent source. Recent methods updates, e.g., Methods 8260C and 8270D, contain second source checks of the initial calibration which provide that assurance. The following change in wording to 8000C reflects this intent:

9.4.1 The reference samples are prepared from a spiking solution containing each analyte of interest. The reference sample concentrate (spiking solution) may be prepared from pure standard materials, or purchased as certified solutions. ~~If prepared by the laboratory, the reference sample concentrate must be~~

~~made using stock standards prepared independently from those used for calibration.~~ To demonstrate accuracy and precision for staff, instrumentation, or when changes in procedure are implemented, it is recommended that where the initial calibration is checked with a standard from an independent source, the initial calibration and the reference sample be made from the same source. This will limit the scope of the test to preparation and analysis and eliminate any additional variability due to differences between sources of standards.