9445.1993(03)

CLARIFICATION ON ANALYTICAL QUANTITATION USING GC/MS METHODS

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

April 8, 1993

Mr. Alex M. Blanche
Analytical Technologies, Inc.
225 Commerce Drive
Fort Collins, Colorado 80524

Dear Mr. Blanche:

This letter is in response to your inquiry of March 30, 1993, requesting clarification on analytical quantitation using GC/MS methods. You are correct in your use of the average RF values obtained for the initial five-point calibration curve for the quantitation of RCRA analytes using Methods 8240, 8260, and 8270. The daily midpoint check standard was only intended to verify that the GC/MS instrument has not drifted out of its initial calibration range. If the daily calibration check fails, the analyst must then regenerate a new five-point calibration curve.

It is not scientifically sound to quantitate over a wide calibration range using only a one-point calibration curve generated from the daily check standard. In addition, analytical samples should be prepared so that they will fall within the working range of the initial five-point calibration curve.

We have drafted language to clarify this five-point vs. one-point calibration issue. This revised language is currently scheduled to be included in the Third Update revisions of the GC/MS methods. However, there is a possibility that it could be moved to the Second Update in response to public comment.

If you have any additional questions, please call me at 202-260-4761.

Sincerely,
Barry Lesnik, Chemist
Methods Section (OS-331)
RCRA Organic Methods Program Manager