US EPA Method 3546 Officially Incorporated into SW-846



In an announcement made 3 January 2008, the US EPA provided notice of the addition of 23 new analytical methods to SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.* This includes the addition of Method 3546, a microwave extraction procedure for extracting water insoluble or slightly water soluble organic compounds from soils, clays, sediments, sludges, and solid wastes.

The full notice can be viewed at :

http://www.epa.gov/fedrgstr/EPA-WASTE/2008/January/Day-03/f25575.pdf

Analytes: Organochlorine Pesticides, Semivolatile Organics, PAH's, PCB's, Phenoxy Acid Herbicides, Phenols, Dioxins and Furans

Method 3546 does not specify an exact microwave program but rather supplies a range of parameters as follows:

Sample Matrix: Soils, Clays, Sediments, Sludges and other Solid Wastes Sample Size: 2-20 grams Solvent Volume: 25mL Temperature: 100 - 115 C Pressure: 50 - 150 psi

Based on this information, CEM would suggest the following program:

Sample Size: 5-10 grams (maximum of 20 grams) Solvent Volume: 25mL Ramp Time: 20 minutes Temperature: 110 C Hold Time: 15 minutes