



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

OFFICE OF SOLID WASTE
AND EMERGENCY RESPONSE

Hamid Shirkhan, President
Fluid Management Systems
580 Pleasant Street
Watertown, MA 02472

April 29 2008

Dear Mr. Shirkhan:

The Environmental Protection Agency's Office of Solid Waste (OSW) has reviewed the data that you submitted on Fluid Management Systems, Inc.'s (FMS) Automated Pressurized Liquid Extraction (PLE)/Power-Prep system. Generally, the RCRA Methods Program evaluates only new and proposed additions to existing methods, rather than specific pieces of equipment that may be appropriate for any given method. With that said, the FMS system falls within the inherent SW-846 method selection and modification flexibility afforded by OSW, therefore, we agreed to provide this evaluation.

The data support FMS's claim that, when proper extraction solvents pressure, and temperature regimes are employed, the system is an effective and efficient means of extracting polychlorinated biphenyls, dioxins and furans, chlorinated pesticides and herbicides, organophosphorus pesticides, polyaromatic hydrocarbons, other volatile and semi-volatile organic contaminants from a variety of solid environmental samples. Such samples include soil, sludge, sediment, and waste solids. The data suggest that the PLE/Power-Prep system, when using the same chemistry and absorbent materials used in current procedures can provide comparable performance to both SW-846 Methods 3541 and 3545A.

The use of the PLE/Power-Prep system would, therefore, be acceptable for analyses performed for compliance with the Resource Conservation and Recovery Act (RCRA) program whenever the user employs the general quality control and quality assurance procedures described in Chapter One of *Test Methods for Evaluating Solid Waste* (SW-846) and meets either performance acceptance criteria specified in Methods 3541 and 3545A or other suitable project-specific data quality objectives depending on the application. This letter does not constitute an EPA endorsement or exclusive recommendation for use.

We appreciate the efforts that FMS is making to improve the quality of environmental monitoring while reducing the time and labor involved in carrying out the analysis. If you have any questions regarding this letter or of other environmental monitoring issues, please contact me at (703) 308-0437 or by e-mail at yang.shen-yi@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Shen-yi Yang".

Shen-yi Yang
RCRA Methods Program Manager
US EPA Office of Solid Waste
Economics, Methods, and Risk Analysis Division