



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

July 30, 2012

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Guidance on the Interpretation of the PM Filter Archive Requirements Described in 40 CFR Part 58.16

FROM: Lewis Weinstock, Leader *Lewis Weinstock*
Ambient Air Monitoring Group (C304-06)

TO: Air Monitoring Program Managers and Staff

We have received questions on the use of low volume PM₁₀ filters that can provide multiple measurements of PM₁₀, specifically the PM₁₀ half of the PM_{10-2.5} measurement, and PM₁₀ Pb.

Allowance for the filters to be used for both PM₁₀ and Pb analysis reduces the number of samplers required at the monitoring sites and creates other efficiencies. The EPA has encouraged this practice with guidance to perform PM₁₀ mass measurements prior to performing Pb analysis on the same filter. Now that there is an approved FEM Pb ICP-MS technique, which will destroy the PM₁₀ Teflon filter during sample extraction (the XRF FRM technique is non-destructive and, therefore, the filter can still be archived), monitoring organizations have asked whether using the PM₁₀ filter for multiple uses with a destructive ICP-MS Pb FEM method is in conflict with the following 40 CFR Part 58.16 requirement that:

"The State, or where applicable, local agency shall archive all PM_{2.5}, PM₁₀, and PM_{10-2.5} filters from manual low-volume samplers (samplers having flow rates less than 200 liters/minute) from all SLAMS sites for a minimum period of 1 year after collection."

The requirement goes on to state that the archived filters would be made available to EPA or other federal agencies, during the 1-year archive period, for supplemental analysis. Therefore, the archive requirement is to ensure that the filters are available, in a viable condition, for beneficial supplemental uses. Since the approved Pb FEM technique is available for use and EPA has encouraged multiple use of filters in order to reduce capital and resource costs, the agency feels this is an appropriate use for the filters and, therefore, a legitimate reason for not archiving filters that fall into this category of use.