Georgia Department of Natural Resources

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M E M O R A N D U M

TO: Georgia Licensed Asbestos Abatement Contractors
                Building Owners and Operators
                Asbestos Consultants

FROM: William Spain
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SUBJECT: Post Asbestos Abatement Clearance and Other Asbestos Air Sampling Issues

The EPA/AHERA regulatory clearance level for asbestos abatement projects in schools (Grade K-12) is 0.01 f/cc or lower by phase contrast microscopy (PCM) analysis based on each result of at least five samples per abatement area, or 70 s/mm^2 or lower by transmission electron microscopy (TEM) analysis based on the average of at least five samples per abatement area. The sample air volumes normally required to measure these levels are at least 3,850 liters for each sample analyzed by PCM and at least 1,200 liters for each sample analyzed by TEM. We remind you that these clearance levels are mandatory for school abatement projects and we highly recommend you use them for non-school projects.

We often see clearance and personal air sampling records which cause the results to be questionable. For example, we see sampling records indicating that all sampling periods started and stopped at nice even clock times. Sometimes the record indicates even two or five samples all started and stopped at the same identical time. In many cases, the record states all sample flow rates were nice even numbers, and the same, from pump to pump, and from day to day. While all of this is possible, it is not what usually really happens on a project.

The flow rates of pumps should be measured with devices which are traceable to primary calibration devices, such as bubble-burettes, or electronic calibration devices. Rounding off of data should be avoided beyond the second significant digit (i.e. 3.00 L/min vs. 2.92 L/min). Rounding data can create a multiplier ripple effect resulting in variations as much as +/- 23% in the final value. Accurate and detailed records are essential and should be maintained for sample times, flow rates, calibration checks, and all other pertinent facts.

Please consider these issues and discuss them with the appropriate persons for your projects. It could help save you from regulatory or liability problems. For example, exposure assessment issues (air sampling & analysis) are the items most cited by OSHA under their 1926.1101 asbestos standard.

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