The proposed asbestos standard requires that sampling be tested using Transmission Electron Microscopy (TEM). This analysis is very accurate, albeit very expensive. Each test runs about $100 per sample. A Phase Contrast Microscopy (PCM) test runs about $7-$10 per test. PCM does not have the resolution to discern asbestos fibers from other non-hazardous fibers. If the fiber count is over 2 fibers per cubic centimeter of air (or whatever limit is set by whatever agency) by PCM then a TEM can be run to determine if there is an airborne asbestos problem.

If only TEM's can be run then not as many samples will be taken and analyzed. PCM can offer sufficient accuracy to assure worker safety. Fourteen PCM samples can be taken for every TEM sample and so more areas can be sampled and determined if there is a hazard or not.

Requiring TEM analysis will reduce the number of samples that are taken and so will limit the number of areas tested. Untested areas suspected of asbestos contamination are just as upsetting to workers who have to work in these areas as areas confirmed to have contamination. This TEM requirement should be modified to allow PCM testing.

Stu Bailey
Industrial Hygienist
Pinnacol Assurance
(303) 782-4404 office
(303) 249-4710 cell