

BAPAT Program Summary

Adverse health effects resulting from exposure to asbestos have been anecdotally documented as far back as ancient Rome, where slaves weaving asbestos fibers into textile products became weakened and suffered premature death. Although asbestos-containing materials are not routinely sold in the United States today, their widespread use in construction and other industries around the world for much of the 20th century makes the potential for asbestos-related health risks a continuing concern. Building owners, building occupants, employers, and workers around the world are called upon every day to make asbestos-related decisions based on laboratory test results, and it is critical that those test results are reliable

A well-run proficiency testing (PT) program provides such a means to evaluate laboratory competence and also provides valuable education through test samples that can be used as part of a laboratory's internal quality assurance (QA) program. RTI has been a leader in the field of asbestos analysis and method development and validation, beginning with our collaborative partnership with the U.S. Environmental Protection Agency (EPA) to conduct PT and to develop the Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA-600/M4-82-020; 1982), and the Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116; 1993).

For over 30 years, RTI International has partnered with the American Industrial Hygiene Association (AIHA) and AIHA PAT Programs, LLC's Bulk Asbestos Proficiency Analytical Testing (BAPAT) Program to administer such a program. RTI has demonstrated its strength in QA/quality control (QC) by its accreditation by AIHA as a bulk asbestos analysis laboratory. The BAPAT Program highlights one of many intersections of our areas of expertise—our understanding of industrial hygiene and occupational exposures, our deep experience in analyzing fibrous minerals and synthetic materials, and our experience in the design and administration of laboratory proficiency testing programs.

Laboratory facilities include modern, state-of-the-art polarizing light microscopes, stereoscopes, an X-ray diffractometer, and a transmission electron microscope for detailed characterizations of candidate test materials. RTI maintains a repository of over 350 bulk asbestos-containing and nonasbestos-containing building materials for use in the BAPAT Program as proficiency test samples. These materials ensure that the BAPAT Program has available a variety of materials representative of the analytical challenges laboratories are likely to encounter.