

ASBESTIFORM MINERALS IN INDUSTRIAL TALCS: COMMERCIAL DEFINITIONS
VERSUS INDUSTRIAL HYGIENE REALITY

John M. Dement
National Institute for Occupational Safety and Health
Cincinnati, Ohio

As part of its industry-wide study of the talc industry, the National Institute for Occupational Safety and Health (NIOSH) has conducted detailed industrial hygiene studies of mine and mill operations processing talcs contaminated with asbestiform minerals.

The principal analytical method used for studies of asbestiform min-

erals in talc bulk samples and airborne dust samples is analytical transmission electron microscopy utilizing selected area electron diffraction and microchemical analysis for fiber identification. This presentation includes a discussion of the methods of analysis being used by NIOSH and comparisons of results of analysis with other analytical techniques. Also included are results of NIOSH industrial hygiene studies in asbestiform talc operations and comparisons of airborne fiber characteristics (fiber length, diameter, aspect ratios, etc.) in these operations with other industrial processes using asbestos fibers.