commercially viable sources of asbestos are found in Illinois, a fact which might otherwise invoke a far more comprehensive set of regulations. The uniqueness and industrial usefulness of the mineral is a consequence of its flexibility, tensile strength, non-inflammability and its resistance to acids, alkalies and electricity.

Some asbestos fibers get into the atmosphere from non-industrial sources. See Asbestos Air Pollution Control, Institute for Environmental Quality, prepared by Colin F. Harwood, Ex. 20. These range from rock outcrops, farming and excavation for construction purposes to the use of talcum powder. Emissions from rock outcrops occur as a consequence of natural eroding processes such as earthquakes, temperature, wind and rain. Farming of soils in areas containing asbestos rock will likewise cause emission of these fibers. Construction requiring excavation in asbestos containing rock for housing, pipe-laying and road construction constitute a source of asbestos emission into the atmosphere. Recent research indicates that talcum powder, while basically a mineral rock dust, does contain fibrous material, and represents a threat of asbestos bodies.

Obviously, the thrust of the regulations does not seek to control asbestos emissions from these sources. Further, the absence of asbestos mining in Illinois eliminates this activity as a source of danger. It is the processing of asbestos in manufacturing and the use and fabrication of asbestos and asbestos and fiber containing products to which the regulations are principally directed. The health dangers inherent in asbestos inhalation arise at the start of the asbestos processing cycle and include the loading and storage of milled asbestos, the transporting of bagged asbestos to the opening area, fluffing of compacted fibers and the mixing of asbestos fibers with other materials. (Ex. 20, Harwood, Page 7.)

Principal user of all grades and varieties of asbestos fibers is the asbestos-cement industry producing asbestos-cement pipe used to convey water, sewage, industrial and gaseous products and serving as conduits for electrical and telephone cables. Other asbestos-cement industry products include roofing shingles, building boards, marine board and laboratory bench tops. To manufacture these products willowed fibers are dry-mixed with fine-ground silica, and a slurry formed by addition of water. The end products of these industries require finishing steps which again generate asbestos emissions. These include sawing, turning, drilling and sanding, each producing large quantities of asbestos-laden dust, and some clinging to the surface of the items being worked upon, again becoming a potential emission source.

A second major use of asbestos fibers is in the manufacture of asbestos vinyl floor tile and asbestos asphalt road paving compounds. Here again, emissions result from the manufacture of these products and to a lesser degree from the use and ultimate processing