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SPRAYED ASBESTOS-CONTAINING MATERIALS IN BUILDINGS: A Guidance Document

by

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ABSTRACT

The recognition of the potential health hazards from exposure to asbestos fiber and the increasing use of this mineral in many products over the past several decades has prompted the U.S. Environmental Protection Agency and other federal agencies to enact regulations for its safe handling to protect the public, the environment and the worker. This document is prepared for those involved in the use, removal, and disposal of asbestos materials in the building trades.

Asbestos in all its forms is considered a serious respiratory hazard. Individual fibers are invisible to the naked eye and their small size gives them prolonged buoyancy even in still air. Unlike most chemical carcinogens, the mineral fibers persist in the environment almost indefinitely and, when present in a building space open to its occupants, represent a continuous source of exposure. From a toxicological perspective, the latency period before onset of clinical signs is typically decades leading to a difficulty in linking cause and effect. Since the beginning of the century, asbestos has been used as a major constituent or an important additive to many consumer products so that there are many sources of exposure to the general public. In the past few tens of years several asbestos products have been sprayed on structural steel for fireproofing or have been sprayed as decorative coatings on ceilings.

With a view toward controlling exposures to the public, guidelines are presented for the detection and monitoring, removal or encapsulation, and disposal of asbestos-containing building materials. Measures available to protect workers and building occupants are presented based on field measurements and theoretical considerations. Sampling procedures are discussed so that the user of this document can take an active role in determining whether protective action is needed and, if so, how best to protect himself, the public, and the environment.

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