

decorative applications, but also was clarified to exclude all applications covered with a particular type of nonfriable material, as published in the FEDERAL REGISTER (43 FR 26372). In addition to these regulations, emission standards have been promulgated under NESHAPS for asbestos mills, asbestos manufacturing facilities, and asbestos fabrication plants. (See 40 CFR, Part 61, Sections A and B for a compilation of all asbestos regulations issued under NESHAPS.)

The second set of EPA regulations is contained in the "Friable Asbestos-Containing Materials in Schools, Identification and Notification Rule," as published in the FEDERAL REGISTER (47 FR 23360). Known as the Asbestos-in-Schools rule, it requires all private and public primary and secondary schools to inspect, sample, and analyze friable materials to determine if asbestos is present. If friable asbestos is present, all school employees must be informed of the location of these materials and each custodial or maintenance employee must be provided a copy of the EPA publication, "A Guide for Reducing Asbestos Exposure," as published in the FEDERAL REGISTER (47 FR 23360). In addition, the school's parent-teacher group (or parents, if there is no organized group) must be notified of the presence of friable asbestos.

The OSHA regulations were first issued in 1972 and modified in 1976. (See 29 CFR, Part 1910 for the complete text.) They specify airborne exposure standards for asbestos workers, engineering and administrative controls, workplace practices, and medical surveillance and worker protection requirements. In 1982, OSHA announced its intention to make the exposure standards more stringent.* (See the "Calendar of Federal Regulations," published in the FEDERAL REGISTER [47 FR 1807].) The OSHA regulations apply to all workplace activities involving asbestos, including removal of asbestos-containing materials from buildings.

Although the NESHAPS and OSHA regulations include standards to reduce exposure to airborne asbestos, the standards were designed primarily to protect the health of people living near asbestos plants, working in the asbestos industry, or removing asbestos from buildings. Exposure to asbestos by persons occupying buildings with asbestos-containing materials is not addressed directly by the standards. Specifically, EPA's NESHAPS for asbestos are directed only at emissions into the outside air (no "visible emissions" resulting from asbestos-handling operations) and do not apply to indoor levels.

OSHA provides specific worker exposure standards, but the application of these standards to nonindustrial settings is inappropriate for two reasons. First, the current standards were set to protect workers against only asbestosis, not cancer. Second, the measurement technique for airborne fibers required to determine OSHA compliance cannot distinguish between asbestos and nonasbestos fibers. The measurement problem is not a major shortcoming in industrial settings where most airborne fibers are expected to be asbestos. However, airborne asbestos may represent only a small fraction of all fibers in the air in buildings, and the OSHA measurement technique may produce misleading conclusions. (Other limitations of the OSHA technique further confound the measurement of airborne asbestos in buildings. See Chapter 3, Section 3.2.3, for a more detailed discussion of measuring airborne asbestos.)

EPA's concern about potential indoor exposure is reflected in the Asbestos-in-Schools rule. Its intent is to reduce exposure to asbestos by locating asbestos-containing materials and alerting school employees and parents of school children to the presence of asbestos. However, standards for allowable airborne asbestos concentrations or exposure levels are not specified.

*As of July 1, 1976, the OSHA standards were set at 2 fibers per cubic centimeter averaged over 8 hours and a ceiling level not to exceed 10 fibers per cubic centimeter "at any time". OSHA is now evaluating the effect of lowering the 8-hour standard to either 0.5 or 0.1 fibers per cubic centimeter in order to protect workers against cancer, as published in the FEDERAL REGISTER (47 FR 1807).