

Although commenters were unanimous in recommending that OSHA adopt a separate standard for construction, many participants emphasized that there were significant differences in exposures, degree of hazard, work conditions, and applicable controls associated with various types of asbestos construction work (Exs. 84-307, 84-457, 328, 330, Trs. 6/20, 7/12.). As described above in Section IX, Standards Recommended to OSHA by Interested Parties, several participants suggested various methods of dealing with these differences. For example, the Asbestos Information Association of North America (AIA/NA) recommended the adoption of a certification program involving the classification of asbestos-containing materials according to their potential for releasing airborne asbestos fibers (Ex. 84-307). A similar scheme for categorizing products was suggested by the BCTD (Ex. 84-424). The AGC stressed the variability in asbestos construction tasks in a pre-hearing submittal that stated:

... the vast majority of exposures are both short term and at low levels. Most exposures are incidental to other work. . . . [and involve] asbestos products not readily friable. The risk of heavy exposure will continue to attend abatement, demolition, and similar kinds of construction activity. . . . OSHA should. . . . [develop a standard that requires] a graduated response to the risk of exposure, one which varies with the risk. (Ex. 84-457)

OSHA finds the record evidence compelling both as regards the promulgation of a separate standard for construction and as regards the development of a standard tailored to the varying levels of risk associated with different construction activities. Accordingly, the final standard applies to all occupational exposures to asbestos in the construction industry, but is tiered to apply increasingly stringent requirements to those work operations associated with the highest exposures. As the record demonstrates, employees engaged in asbestos removal, demolition, and renovation operations generally have the highest asbestos exposures of all construction workers. The standard therefore includes specific paragraphs addressed to these operations: for example, employers conducting such abatement activities are required to establish temporary enclosures maintained under negative pressure and to ensure that their workers, where feasible, use the special hygiene facilities and decontamination procedures prescribed in paragraph (j)(2). OSHA believes that this tiering approach will simultaneously ensure maximum employee protection while

scaling the burden of compliance with the standard to the degree of hazard associated with particular operations.

Depending on the nature and extent of exposure, certain provisions of the final rule may not be applicable in certain situations or may have limited applicability. The applicability of many provisions of the standard is based on the results of initial employee monitoring conducted by the employer or on the availability of other objective data concerning employee exposures or product characteristics. For example, paragraphs (k)(3)(i) and (m)(1)(i) are triggered by employee exposures above the action level, while other provisions, such as those in paragraphs (e)(1), (i)(1), and (k)(1)(i) are triggered by exposures above the PEL.

In addition, the revised standard for construction recognizes that countless maintenance operations involving the handling of asbestos-containing materials are conducted in the United States daily, and that these operations, which are small in scale and of short duration, are vastly dissimilar in degree of hazard to many other asbestos-related construction operations such as asbestos abatement projects. Exemptions from many of the final rule's provisions (e.g., paragraphs (e)(6), (i)(4), and (j)(1)(i) have accordingly been provided in the revised standard for "small scale, short-duration operations." Although OSHA finds it impossible to specify with precision the exact size of a "small-scale" maintenance job or to pinpoint the time involved in a short-duration task, the Agency believes that providing employers with examples of the type of operations that OSHA considers to be included in this class of operations will provide employers with the guidance needed to use the final rule's exemptions for such operations appropriately. Paragraph (e)(6) enumerates several of these operations, including: Pipe repair; valve replacement; installation of telephone circuits, electrical conduits, and drywall; and other general building maintenance and renovation tasks. For some of these operations, the quantities of asbestos-containing material that will need to be handled will be small enough so as not to result in employee exposures above the action level or PEL; in these cases, the employer will not need to comply with the provisions that are triggered by these exposure levels. For many other maintenance operations, employers can choose to use exposure-control measures, such as glove bags, that effectively isolate the employee from the asbestos-containing materials being removed. Employers who use glove bags and other similar techniques will avail

themselves of the requirements of provisions that are triggered by the action level or PEL, since such worker isolation techniques effectively reduce airborne concentrations of asbestos to below the revised level of 0.1 f/cc.

The operations listed in paragraph (a)(1) of the scope and application paragraph account for most of the construction jobs likely to involve the installation, handling, removal, and disposal of asbestos-containing material; however, OSHA is aware that no such list can be all-inclusive.

Paragraph (a)(1) makes clear that the revised standard applies to demolition or salvage operations where asbestos is present. Paragraph (a)(2) includes in the scope operations involving the removal or encapsulation of asbestos-containing products. Such asbestos abatement projects are typically associated with the highest asbestos exposures occurring in construction, and reflect an increasing national awareness of the hazards of exposure to asbestos. The volume of asbestos abatement work is increasing at a rapid rate, as more and more Federal agencies, local governments, and private-sector employers and building owners become aware of the hazards posed by the existence of asbestos-containing insulation materials and coatings in their facilities. The revised standard addresses the high hazard potential of work in the asbestos abatement portion of the construction industry by applying separate and stringent requirements to these operations. For example, employers engaged in such work are required to establish negative-pressure barriers enclosing the area where such work is taking place (paragraph (e)(6)) and to appoint a competent person to oversee the operation of this enclosure. These employers are also required to provide disposable work-suits for all employees working within the abatement enclosure (paragraph (i)(4)) and to ensure that these employers observe strict decontamination procedures before they leave the work-site.

The construction operations listed in paragraph (a)(3) include construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof that contain asbestos. These activities would involve minor operations, such as replacement of a gasket made of asbestos-containing material, repair of a section of drywall, or sanding down of old asbestos-containing floor tiles.

The installation of new asbestos-containing products, such as floor tiles and asbestos sheet and pipe, is called