

renovation work area. Similar procedures are contained in several of the asbestos removal specifications submitted to the rulemaking record (Exs. 92-8, 92-11, 92-25, 92-226). The specification for asbestos removal projects for the State of North Carolina requires that:

(1) Workers entering the work area remove street clothes, don disposable coveralls and respirator, and proceed through the shower to the equipment room and work area.

(2) Upon leaving the work area, the worker stops in the equipment room to remove contaminated clothes, and places them in plastic bags for disposal.

(3) The worker proceeds to the shower wearing only his respirator and showers to remove all traces of asbestos contamination.

(4) The worker then moves to the clean change room where he removes his respirator, cleans and inspects it, and dresses (Ex. 92-008).

Following these procedures appears to OSHA to be a reasonable method for ensuring that asbestos contamination is removed from the worker's body, thus preventing worker exposure, the exposure of family members, and the spread of asbestos contamination to areas outside the work area.

Paragraph (k)—Communication of Asbestos Hazards to Employees

In paragraph (k) of the revised standard, OSHA has included requirements to ensure that the dangers of asbestos-containing materials are communicated to employees by means of signs, labels, and employee information and training. The requirements for the signs and labels mandated in this section parallel those in OSHA's Hazard Communication standard (29 CFR 1910.1200). Although the Hazard Communication standard, as originally promulgated, applied only to the manufacturing Standard Industrial Classification (SIC) codes (SICs 20-39), OSHA has subsequently announced its intention of expanding the coverage of this standard to the construction industry, as well as to other industry sectors not initially covered. Ensuring that the content and format of the signs, labels, and employee information and training provisions of the final asbestos standard for construction are consistent with those of OSHA's Hazard Communication standard will thus provide construction employers with a consistent and comprehensive approach to alerting their employees to the hazards of asbestos exposure and facilitate the future inclusion of construction in the standard's scope.

OSHA's April proposal indicated that the evidence regarding the carcinogenicity of asbestos had prompted OSHA to consider updating the substantive requirements for signs and labels in the final rule. Specifically, the proposal considered adding a requirement that signs be posted to demarcate regulated areas. The Building and Construction Trades Department (BCTD) of the AFL-CIO urged the inclusion of similar requirements in its recommended standard for the construction industry (Ex. 330).

Signs and Labels. OSHA's final rule includes specifications for signs to be posted at all locations where regulated areas have been established to indicate that concentrations of airborne asbestos fibers exceed or may exceed the 0.2 f/cc PEL; such signs are to bear the following legend:

**DANGER
ASBESTOS
CANCER AND LUNG DISEASE
HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED IN THIS
AREA**

The purpose of these signs is to minimize the number of employees in a regulated area by alerting them to the fact that they must have authorization from their employer and take the appropriate protective measures before entering. Furthermore, as discussed in Section X (Summary and Explanation for a Revised Standard for General Industry), signs serve to apprise employees of the hazards to which they are exposed in the course of their employment, and foster cooperation between the employee and employer in controlling workplace hazards.

The standard also requires that all asbestos products and containers of asbestos products, including waste containers, be labeled with the following information and with a warning statement against breathing airborne asbestos fibers:

**DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE
HAZARD**

Both employee and industry representatives generally supported the inclusion in a revised standard of requirements for posting signs to demarcate regulated areas and for informing employees of the health hazards of asbestos by means of signs and labels (Exs. 330, 270, 328, Tr. 7/10). However, the BCTD's recommended

standard (Ex. 330) would have required that both signs and labels be bilingual, be written in the languages that predominate in the workplace, and include symbols to assist comprehension wherever necessary. "The need for such a provision," the BCTD maintained, "would appear to be self-evident in an industry which employs over 60,000 workers whose native tongue is not English" (Ex. 330). In addition, the BCTD's standard recommended a labeling provision requiring the label to display the test conditions in effect for determining the category of an asbestos-containing product, (the BCTD recommended a system of product and process categorization—see discussion under scope, paragraph (a)), and information on work rates, ventilation rates, and work practices appropriate to the product or process (Ex. 330).

As written, paragraph (k)(1) in the revised asbestos standard is consistent with CFR 1910.1200(f) and with Section 6(b)(7) of the OSH Act, which prescribes the use of labels or other appropriate forms of warning to apprise employees of the hazards to which they are exposed. The Hazard Communication standard specifies that "the employer shall ensure that labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each workshift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well" (29 CFR 1910.1200(h)(9)). OSHA believes that this language addresses the concern of communicating the hazards of asbestos to non-English-speaking employees without imposing an unduly stringent requirement on those construction employers whose work force is comprised solely of English-speaking persons.

The revised standard permits two exceptions to the labeling requirement: no label is required in those instances where (1) asbestos fibers have been modified by a bonding agent, coating, binder, or other material provided that the manufacturer of the product can demonstrate that during any reasonably foreseeable use (including handling, storage, disposal, processing, or transportation) employee exposures will remain below the action level; or (2) where asbestos is present in a product in concentrations less than 0.1 percent by weight. These exceptions are identical to the labeling exceptions