resinous binders used in these products, and new paragraph (g)(11) therefore does not require special work practices to prevent fiber release during installation. In addition to the requirements that apply to removal, paragraph (g)(11) contains a notification requirement applicable to newly-installed products. When materials labeled as containing asbestos pursuant to paragraph (k)(8) of the standard are installed on non-residential roofs, the contractor must notify the building owner of the presence and location of the asbestos-containing material. Under the standard, building owners must be aware of the presence of ACM, and this notification requirement will give the building owner the information needed to fulfill the owner's compliance duty. The requirement is limited to installation of ACM on non-residential roofs because owners of residential dwellings are typically not employers subject to the standard and are therefore not required to maintain records about the presence of asbestos in their buildings.

Because work on jobs covered by new paragraph (g)(11) is not Class I, Class II, or Class III work, such work is not included under paragraph 1101(m)(1)(i) in the determination of which employees are covered by the medical surveillance provisions of the standard unless during such jobs employees are exposed at or above the TWA or excursion limit or wear negative pressure respirators. In addition, the installation or removal of intact asbestos-containing roof coatings, mastics, cements and flashings are not subject to any provision of the standard other than new paragraph (g)(11) as long as the materials remain intact and the requirements of paragraph (g)(11) are satisfied.

OSHA notes that materials very similar to these ''incidental'' roofing materials are used for other purposes; for example, asbestos impregnated asphaltic wrap is used for protection of underground pipes. OSHA regards removal of such intact materials as being governed by (g)(11) of the construction standard [(g)(12) of the shipyard employment standard.]

The corrections, clarifications and interpretations that are discussed in the following sections apply to roofing operations in which asbestos is present in the primary roofing material, as in the case of built-up roofing (BUR) and A/C shingle roofs.

(b) *Use of Wet Methods and Respirators During Roof Removals*

The standard recognizes that wet methods are an important means of control during asbestos removal operations. When the surface of material being removed is wet, some asbestos fibers that would otherwise be released when the material is disturbed will adhere to the liquid rather than become airborne. Therefore, paragraph (g)(1)(ii) generally requires that wet methods be used to control worker exposure to asbestos during removal, as well as other, operations. However, paragraph (g)(1)(ii) recognizes that wet methods are sometimes infeasible and provides that wet methods need not be used in such circumstances. One situation in which paragraph (g)(1)(ii) indicates that wet methods may be infeasible is when they would create slipping hazards during roofing work.

This reference to slipping hazards in roofing work was included in the standard because a number of commenters expressed concern that an unconditional requirement to use wet methods could increase safety hazards associated with roofing work. (See 59 FR at 41006). Wetting the surface of a roof can make the surface slippery and increase the likelihood that a worker could slip while walking or working on the roof. This would be particularly dangerous on sloped roofs, where a slip could result in a worker falling off the edge of the roof. OSHA recognizes that the potential for falling from a roof makes roofing work hazardous even under the best of circumstances, and use of wet methods that make the roof surface slippery can add significantly to that hazard.

OSHA believes that the potential for increased safety hazards when wet methods are used on sloped roofs dictates that wet methods should not be used on sloped roofs unless there is a realistic likelihood that the TWA or excursion limit would be exceeded if wet methods are not used. Data in the rulemaking record indicate that exceedances of the TWA or excursion limit will not occur when the material being removed is intact and the work practices specified in the standard are followed. (See 59 FR at 41005). Accordingly, the standard is being amended to provide that wet methods are not required on sloped roofs when the ACM being removed is intact.

Two corrections to the standard are being made to effectuate this intent. Paragraph (g)(1)(ii) is being corrected to state that wet methods need not be used during roofing work when they are not required under paragraph (g)(8)(ii). And paragraph (g)(8)(ii)(B) is being corrected to provide that wet methods must be used to remove roofing materials that are not intact or that will be rendered not intact during removal unless wet methods are not feasible or will create safety hazards. As amended, paragraph (g)(1)(ii) makes clear that roofing materials are only subject to requirements for wet methods that are explicitly contained in paragraph (g)(8)(ii). There are two such requirements. First, paragraph (g)(8)(ii)(B), as amended by this notice, retains the requirement for use of wet methods to remove non-intact material unless the competent person determines that wetting the material is not feasible or would create a safety hazard. Second, paragraph (g)(8)(ii)(C) requires that cutting machines be continuously misted during use unless a competent person determines that misting substantially decreases worker safety. As cutting machines are only used in the removal of built-up roofing, which is not found on sloped roofs, the standard does not require the use of wet methods on sloped roofs when the material being removed is intact.

When wet methods are not used, the increased potential for airborne asbestos may dictate the need for other precautions, such as respirator use. Paragraph (h)(1)(iii), as originally written, required use of respirators during all Class II and Class III work that was not performed using wet methods, without regard to actual or anticipated exposure levels. However, respirator use can also increase the safety hazards associated with roofing work by limiting workers' visibility and mobility. Moreover, roofing work is sometimes done in hot weather, which can add to the discomfort associated with respirator use. Respirator use may also increase the risk that roofing workers performing the often physically demanding labor required of them during hot weather will suffer heat stress. OSHA believes that the drawbacks of respirator use on roofs would lead many roofing contractors to use wet methods rather than respirators on sloped roofs if one or the other is required. Therefore, a requirement that either respirators or wet methods be used would lead to increased use of wet methods on sloped roofs, with an attendant increase in slipping and falling hazards.

OSHA is reluctant to include a requirement in the standard that could increase safety hazards during roofing work unless such a requirement is clearly needed to avoid overexposing workers to airborne asbestos. As noted above, evidence in the rulemaking record indicates that asbestos levels will not exceed the TWA or excursion limit when intact roofing material is removed using proper work practices even when wet methods are not used. For the reasons discussed earlier, OSHA has