Mines Safety Bulletin No. 99

Subject: Scaffold tubing — falling objects hazard
Date: 30 March 2012

Summary of hazard

Incidents have occurred recently at mines where scaffold tubing has fallen from one level within a fixed plant to the ground, placing personnel below at risk of serious injury.

In one instance, a bundle of scaffold tubes was being carried down a flight of stairs when a tube slid free from the grip of the scaffolder. It bounced through the railings, falling about 25 metres and landing about 4 metres from personnel passing by outside of the exclusion zone.

In another instance, a scaffold tube passed through the apertures in the walkway grid mesh, landing within the exclusion zone delineated by another work group.

Contributory factors

• Carrying a number of scaffolding tubes without first securing them in a bundle.
• Failure to use a scaffold stillage to transport scaffold tube between levels.
• Size of exclusion zone was inadequate for falling scaffold tubes bouncing out of the drop zone.
• Failure to adequately cover the grid mesh walkway to prevent scaffold tube from passing through the mesh apertures.

Recommendations

• Scaffold tubing should be tied together so that each tube is properly secured, with no more than three tubes carried at a time.
• Use engineer-certified scaffold stillages to transport scaffold tubing from one level to another. The stillage should not be overloaded and all tubing should be adequately secured within the stillage. Stillages should not be used if damaged or distorted.
• The exclusion zone for work above should be sufficiently large to account for scaffold tubing bouncing out of the drop zone.
• Where the grid mesh apertures are large enough to allow scaffold tube or other tools or items to pass through, all walkways in the work area should be covered with planking or plywood sufficiently thick to ensure falling tools and items cannot pass through.
• Where falling objects are identified as a task hazard, consider the use of controls such as catch nets, lanyards, tool straps, or tool buckets. Signage warning of the hazard should be applied at the appropriate traffic areas before commencing the task.
When developing safe systems of work for scaffolding operations, mine sites should apply the same rigour and standards as used for other workplace activities.

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