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PROGRAM INFORMATION BULLETIN NO. P07-19

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SUBJECT: Hazards of Sliding Table Masonry Saws

Who needs this information?

Operators of metal and nonmetal mines, independent contractors, miner's representatives, Mine Safety and Health Administration (MSHA) enforcement personnel, state mining agencies, mine equipment manufacturers, and other interested parties need this information.

What is the purpose of this Program Information Bulletin?

This Program Information Bulletin (PIB) provides guidance to the mining industry to address hazards of using sliding table masonry saws. Sliding table masonry saws are typically designed to cut brick, block, refractories and other uniform masonry-type materials with flat sides. Some dimension stone operations also use these saws to cut irregularly-shaped natural stone. The irregular shape of the natural stone makes the stone difficult to position and/or support securely during cutting. The difficulty in securing some stones in place can create a hazard when saw operators place their hands close to or in the path of the saw blade. Saw operators have been seriously injured while performing this activity.

What steps must be taken to address the hazards?

Affected mine operators, in consultation with the saw manufacturer, should determine whether a saw used to cut stone is appropriate for the intended work. If it is appropriate, the mine operator should follow the manufacturer's recommendations for

its use. If the saw manufacturer does not recommend its equipment for a particular application, such as cutting irregularly-shaped stone, mine operators should not use the saw for that application in its factory-supplied configuration.

The mine operator should assess the risks to saw operators and make necessary modifications to prevent injuries. Risk reduction can be accomplished in several ways: elimination of the hazard; substitution of less hazardous operations or equipment; or the installation of engineering controls. Jigs or other engineering modifications to the saw should assure that the stone is held securely and the saw operator's hands and fingers are positioned away from the blade and out of its path of travel. When possible, the modifications should be made by, in consultation with, or with the agreement of the saw manufacturer.

When the saw, as used in the mine operator's application, presents a non-tolerable risk of injury MSHA believes re-engineering the saw (e.g., installing additional guarding, using jigs to hold stones during cutting) to prevent injuries is required. MSHA does not consider personal protective equipment, training, employee warnings, supervision, signage, or similar administrative controls taken by the mine operator sufficient to address hazards presented by using a saw in an application not supported by the manufacturer.

What is the background for this PIB?

Since 2003, there have been seven severe finger, hand, or arm type injuries associated with cutting irregular or unsupported stones while using masonry saws at metal and nonmetal operations. The hazards exist because these saws are being used for an application for which they were not designed - cutting stones that are irregularly shaped and/or of a shape or size that makes them difficult to secure or control on the table. During the cutting process, due to the size and shape of the stone, operators may free-hand cut the stone or place their hands in close proximity to the blade, exposing them to a laceration, cut, or amputation hazard. Additional risk factors include: using cutting methods not recommended by the manufacturer, difficulty in training equipment operators due to high turnover or language barriers, worker fatigue, hurried production, ergonomic factors, poor maintenance, blade tooth configuration and materials, non-timely replacement of worn or damaged blades, ambient temperature conditions, and slippery conditions resulting from water application while cutting.

What is MSHA's authority for this PIB?

The Federal Mine Safety and Health Act of 1977, as amended, 30 U.S.C. § 801 et seq.; 30 C.F.R. Part 46, § 56/57.14205, § 56/57.15006, 56/57.14107.

Is this PIB on the Internet?

This PIB may be viewed on the World Wide Web by accessing the MSHA home page (<http://www.msha.gov>) and choosing "Compliance Info" and "Program Information Bulletins."

Who is the MSHA contact person for this PIB?

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Who will receive this PIB?

MSHA Program Policy Manual Holders

Metal and Non-Metal Mine Operators

Mine Equipment Manufacturers

Miners' Representatives

Special Interest Groups