

ISSUE DATE: 09/17/07

PROGRAM INFORMATION BULLETIN NO. P07-24

FROM: KEVIN G. STRICKLIN
Administrator for
Coal Mine Safety and Health



SUBJECT: Use of Portable Roof Drills

Who needs this information?

Coal mine operators, miners and miners' representatives, and Mine Safety and Health Administration (MSHA) enforcement personnel should have this bulletin.

What is the purpose of this program information bulletin (PIB)?

The purpose of this bulletin is to increase awareness about the hazards of using portable, handheld roof drills (also known as "stoppers" or "jacklegs" and also commonly referenced by brand names such as the Gopher or the Wombat). MSHA encourages the use of roof bolting machines with Automated Temporary Roof Supports (ATRS) as described in 30 C.F.R. § 75.209(c)(1).

What is the background for this PIB?

On March 29, 2006 a fatal roof fall accident occurred while a portable roof drill was being utilized. The miner who was seriously injured in the March 29, 2006 accident while using a portable roof drill died as a result of those injuries on April 10, 2006. The victim was using the portable roof drill to install roof bolts between the tips of the longwall shields and the face in preparation for a longwall move. Although the miner was positioned under the tip of the shield, a rock fell from the roof, hitting the drill and operator, causing him to fall and strike his head, inflicting fatal injuries.

What is the main point of this PIB?

Portable roof drills should be used only when careful attention is given to the hazards that may accompany their use. MSHA recommends that updated self-propelled equipment be used whenever possible. The use of portable roof drills has two major disadvantages when compared to the use of self-propelled equipment. First, portable

roof drills do not have an Automated Temporary Roof Support (ATRS) system. In most cases, manually installed temporary roof supports are required when using portable roof drills. As a result, the lack of an ATRS system exposes individual miners to the hazard of a roof fall while installing temporary support.

The second hazard encountered when using portable roof drills stems from the material handling aspect. Every year, material handling is a persistent source of personnel injury in mining operations. The size, shape and weight of these machines can pose a material handling hazard as the units and accompanying hoses, etc. are carried from drill set-up to drill set-up locations. Numerous injuries have occurred as drill steel sections get stuck in the drill hole and the unit continues to rotate. In addition, the handling of temporary supports has led to many accidents.

Information

The use of portable roof drills has diminished over the past several years. The areas that required the portability that these machines offered are now often accessible using small versatile rubber-tired or crawler-mounted roof bolters equipped with ATRS systems and operator canopies. Some of these self-propelled machines are as narrow as 52 inches. Manufacturers have also developed roof bolters equipped with ATRS systems that are designed specifically to install roof bolts in preparation for longwall moves. These bolters are designed to be trammed along the panline in the same manner as the longwall shearer. All of these machines have some form of ATRS that will help reduce the span of unsupported roof from the shield tips to the face while bolting for longwall moves. The use of these self-propelled roof bolters diminishes the need for portable roof drills, reducing the miner's exposure to the fall of unsupported roof and material handling hazards.

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. § 75.209 (c) (1);

Is this PIB on the Internet?

This PIB may be viewed on the World Wide Web by accessing the MSHA home page www.msha.gov then choosing "Compliance Info" and "Program Information Bulletins."

Who is the MSHA contact person for this PIB?

Stephen J. Gigliotti, (202) 693-9479
Acting Chief, Division of Safety
Coal Mine Safety and Health
E-mail: Gigliotti.Stephen@dol.gov

Who will receive this PIB?

MSHA Program Policy Manual Holders

Underground Mine Operators

Mine Equipment Manufacturers

Miners' Representatives

Special Interest Groups