Virginia Department of Mines Minerals and Energy

Safety Alert Bulletin

December 13, 2011

On December 7, 2011, an operator of an excavator on a surface mine site was fatally injured when a large rock fell from the highwall and struck the cab of the excavator. The accident occurred at approximately 7:30 a.m., just after dawn. A light rain was falling at the time of the accident.

The excavator was being utilized to load rock haulers from a platform constructed of shot rock directly adjacent to the highwall. When the rock fell from the highwall, the boom of the excavator was parallel to the highwall and the cab side was oriented toward the highwall. The rock struck the front corner of the cab, deforming the cab, and resulted in fatal injuries to the operator.

All ground control plans approved in Virginia require surface mine operators to limit exposure to highwalls. When equipment must be operated in close proximity to a highwall, the cab should be oriented away from the highwall to minimize exposure to the operator. While it is impossible to accurately predict when rocks may fall from a highwall, operating equipment in a safe manner can certainly minimize the impact when it does occur.

Approved ground control plans also require operators to visually inspect a highwall prior to beginning work in any area. The inspections should be comprehensive in order to determine whether any hazards exist on the highwall. Of course, lighting must be adequate to ensure an effective inspection. At night, or in other limited natural light conditions such as fog or rain events, light plants or other effective means to adequately illuminate a highwall should be used to conduct examinations. Highwalls should also be examined from all available aspects, including from above.

The surface mine operator should also have in place an effective method to visually designate hazardous conditions. An effective method would be instantly recognized by anyone working at the mine site and would be visible during all weather and lighting conditions. The methodology for designating hazardous conditions should be posted at the mine site and regularly reviewed with mine foremen and employees of the mine.

It is imperative that any hazardous conditions found be communicated to following shifts. Hazardous conditions encountered should be recorded into the mine record book; and, in addition, the surface mine foreman should also use any other available means to communicate hazardous conditions. Text messaging, voice mails, e-mail notes, and personal contacts are

further examples of how hazardous conditions may be communicated to oncoming shifts. You cannot place too much emphasis on communication of hazardous conditions to those that are schedule to be working in the area. **Proper communication of hazardous conditions, with the ultimate goal being the safety of the mine workers, should be the primary focus of any foreman at every mine!** Every mine should have a system in place whereas hazardous conditions are sure to be communicated to the following shifts.

In addition, it is the responsibility of the oncoming mine foreman to review the records of the preceding shift. Before the mine foreman assigns anyone to a work area, he should be aware of any possible hazardous conditions encountered by the previous shifts.

It takes everyone working together at a mine to ensure the safety of the employees. Thorough examinations must be conducted, different shifts must effectively communicate across barriers, and work places must be made safe before anyone enters.