

DMM Safety Alert:

Clearing The Blast Area

In October 2008, a quarry blast threw a volleyball-size rock approximately 1,700 feet. The rock landed outside the designated "blast area", which was cleared of personnel and equipment, and struck an electrical motor control center (MCC) located approximately 100 feet from the jaw crusher operator's booth. Fortunately, no one was injured, though the crusher was operating and manned at the time of the blast. Over the past 5 years, there have been several "near-miss" incidents such as this. The Virginia Safety and Health Regulations for Mineral Mining defines the *blast area* as "the area of the mine in which concussion or flying material can reasonably be expected to cause injury during detonation." When determining the blast area, the certified mine foreman and the certified blaster in charge must consider the safety of all personnel first and foremost. To avoid this type of incident from occurring, the Virginia Division of Mineral Mining recommends:

- •The certified blaster in charge and the certified mine foreman foreman should include an extra margin of safety when establishing the area to be evacuated/cleared prior to a blast (i.e., the blast area).
- •When determining the size of the blast area, the safety of mine personnel and other individuals is the most important factor to be considered.
- •The design and loading of a blast shall provide sufficient burden, spacing, and stemming to prevent flyrock or other dangerous effects. (4VAC25-40-800.D)
- All personnel shall be removed from the blast area prior to connection to the initiation device and the firing of the blast. (4VAC25-40-800.R)
- ***** Disruption or delay of production activities *must not* be a factor in deciding the size of the blast area!!



MCC Building

Blast Site