

## DISTRICT SAFETY & HEALTH NOTES

### A RELOOK AT NOISE SAMPLING



Drill noise is generated by the pneumatics and engine exhaust, as well as the drill steel. Highwalls can reflect and amplify the noise levels.

MSHA recently published a new chapter N (noise) of the metal and nonmetal health inspection procedures handbook.

The arrival of that publication makes this a good time to remind ourselves of the hazards of noise, what the noise standard requires, and how we can most effectively and economically control noise to protect miners.

Noise is the most common cause of significant hearing loss. Continual exposure to noise levels exceeding 85 decibels leads to permanent hearing impairment. Ringing in the ears is one annoying consequence. Inability to hear or understand instructions and warnings is a much more serious result.

Part 62 of Title 30, Code of Federal Regulations requires mine operators to enroll miners in a hearing conservation program when their full-shift average noise exposure exceeds 85 decibels. When full-shift average noise is above 90 decibels, noise controls must be implemented. Ear plugs and muffs – when worn – can be valuable or even necessary, but should not be substituted for engineering and administrative controls.

Engineering controls actually reduce the noise itself without changing the way the miner does his or her job. They often involve applying sound absorbing materials to cabs or booths, or placing noise absorbing (or reflecting) barriers between miners and noise sources. Sometimes they involve modifying machinery, such as replacing regular fan blades with “quiet” blades, or adding mufflers to exhaust or compressed air systems.

Engineering controls do not have to be expensive. MSHA recently published a comprehensive guide to feasible controls that covers all types of equipment found at mines. That publication can be found on the MSHA web-site at the address: [www.msha.gov/1999noise/noiseresources.htm](http://www.msha.gov/1999noise/noiseresources.htm).

What are administrative controls? These are company policies that restrict how much time a miner works in a noisy area or places an area off-limits completely when certain machinery is operating. They may involve rotating workers or adjusting shift schedules.

Industrial hygienists and scientists in both government and industry continue to partner together in seeking new and better feasible controls to protect our nation’s miners from noise-induced hearing loss.



Vibrating screens can generate over 105 decibels. Grommets and rubber mounts can greatly reduce the vibration-generated noise.