AIRLINE RESPIRATORS

Results of a National Institute for Occupational Safety and Health (NIOSH) and Bureau of Labor Statistics (BLS) survey indicate many mine operators use airline respirators - but are unaware that the couplings must be incompatible with nonrespirable gas or air outlets. **This Alert is to prompt all metal and nonmetal mine operators and contractors using airline respirators to carefully examine their respiratory protection program** because even one misuse of this equipment can result in a fatality. If a respirator’s airline terminal coupling can be connected to equipment other than a designated breathable air source, a fatality can result. Airline respirators are typically used in painting, cleaning, abrasive blasting, refining, and working in confined spaces. Coupling compatibility problems have resulted in the inadvertent supply of nonrespirable gas to the respirators of some nonmine workers, resulting in their deaths. We urge all mine operators to incorporate standard operating procedures making airline couplings incompatible with outlets for other gas systems and to provide training and instruction on the proper use of respirators and their limitations. When required by 30 CFR 56/57.5005, a respirator program must contain all of the elements of the ANSI Z88.2-1969 *Practices For Respiratory Protection*, published by the American National Standards Institute\(^1\), and which includes: “**Air-line couplings shall be incompatible with outlets for other gas systems** to prevent inadvertent servicing of air-line respirators with nonrespirable gases or oxygen.” Application of a unique (failsafe) coupler design prevents accidental connection to the wrong system. Insertion into an incorrect outlet is prevented by the use of different shapes and/or spacing for the mating portions.

If you have any questions about this Alert, or any other occupational health matter, please feel free to contact us. Our job is to improve the health and safety of America’s miners.

**Contact:**

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\(^1\) This publication may be obtained from Global Engineering Documents, phone 800-854-7179, or may be examined in any Metal and Nonmetal Mine Safety and Health District Office of MSHA.