Progressive Lenses (“No Line” Bifocals) In Safety Glasses

1. The Tri-Service Vision Conservation and Readiness Program Office of the Army Institute of Public Health (AIPH) at the U.S. Army Public Health Command (USAPHC) recommends that:

Progressive lenses (“No Line” bifocals) generally should not be used in safety glasses. In an eye hazardous environment, the advantage of variable focus lenses (“No Line” bifocals) is normally outweighed by the distortions produced in the edges of the field of view which may increase risk of injury. Employees who wear the American National Standards Institute/International Equipment Association (ANSI/ISEA Z87.1-2010) American National Standard, Occupational and Educational Personal Eye and Face Protection Devices, variable focus lenses and have good safety records may be allowed to continue to wear them unless they have an accident attributed in whole or in part to the use of variable focus lenses. All others who need multifocal lenses should be required to wear flat top or circular bifocal or trifocal segments. When an employee is authorized to wear variable focus lenses, the employee should bear the additional cost over that of flat top or round segment bifocals.

2. Current guidance for multifocal ANSI/ISEA Z87.1-2010 safety glasses:

a. The straight top bifocal or trifocal is the standard issue multifocal lens type for DOD, to include ANSI/ISEA Z87.1-2010 safety glasses.

b. Use of bifocal or trifocals with lines poses no safety hazard if the user observes standard safety practices.

c. “No Line” bifocals cost significantly more than the standard issue multifocal lenses.

d. Fitting of “No Line” bifocals is much more difficult than standard bifocals and the number of remakes due to patient problems is greater than with standard multifocal lenses.

e. “No Line” bifocals have an area of blurred or distorted vision on both sides of the lower half of the lens. There is a channel of clear near vision that widens at the bottom in the middle of this distorted area. This area of distortion may be a safety hazard.

3. If a local decision is made to offer “No Line” bifocals, then the following should be required:

a. The individual must have prior experience wearing “No Line” bifocals successfully and demonstrate an accident free safety record.

b. The Installation Safety Officer must approve use of “No Line” bifocals on an individual basis. This authorization would have to be documented, possibly as a MFR, and signed by both the individual and the safety officer.

c. The individual would have to pay the difference to upgrade from the standard bifocal, to include the administrative costs of such a program. The cost of the upgrade alone to a “No Line” bifocal could be significantly more than standard bifocals.

d. The individual would have to pay the total cost of any remakes of “No Line” bifocal or remakes to change back to the standard issue lenses.

e. The Installation Safety Officer should monitor the overall injury rate of employees wearing standard vs. “No Line” bifocals.