J.A.Montgomery CONSULTING

SAFETY DIRECTOR BULLETIN

HIGH-VISIBILITY APPAREL GUIDANCE & BEST PRACTICES

According to the 11th edition of the Manual on Uniform Traffic Control Devices (MUTCD), Section 6C.05 High-Visibility Safety Apparel:

> *For daytime and nighttime activity, all workers, including emergency responders, within the rightof-way who are within the TTC zone shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107–2015 publication entitled "American National Standard for High-Visibility Safety Apparel and Headwear," or equivalent revisions, except as provided in Paragraph 4 of this Section. A person designated by the employer to be responsible for worker safety shall make the selection of the appropriate class of garment.*

The current edition of the MUTCD specifies that workers wear high-visibility apparel, meeting the 2015 edition of the ANSI/ISEA 107 Standard. However, employers should be aware that the ANSI/ISEA 107 Standard has been updated to a 2020 version, and manufacturers of hi-vis apparel are now using the updated Standard.

The following is guidance for public employers when purchasing high-visibility apparel.

Definitions in ANSI/ISEA 107-2020

Background Material: Colored fluorescent material intended to be highly conspicuous in day, dawn, and dusk light conditions but not retroreflective.

Retroreflective Material: Material that reflects and returns a relatively high proportion of light in a direction close to the direction from which it came.

Roadway: An area designed or ordinarily used for the purposes of vehicular travel.

Design of Apparel

The ANSI/ISEA 107-2020 Standard provides design guidelines and specifies the photometric requirements, background and retroreflective materials, colors, and placement.

There are three different background colors from which to choose: fluorescent yellow-green, fluorescent orange-red, and fluorescent red. Users should consider the work and natural environment to determine the most conspicuous color for daytime use. Is the environment urban or rural? Are work zone devices and equipment yellow or orange? Choose the fluorescent color that achieves the highest degree of worker contrast.

The 2020 revision of ANSI/ISEA 107 continues with the 'Type' structure:

- Type O for off-roadway situations with moving equipment or vehicles.
- Type R for workers on or near a public access roadway and in proximity to moving equipment/vehicles.
- Type P for emergency and incident responders. Firefighters may still use retroreflective turnout gear compliant with NFPA standards when exposed to flame, heat, or hazardous materials during emergency operations.

In addition, there are four Performance Classes:

- Performance Class 1: appropriate for off-road use where workers can pay attention to moving vehicles, such as parking lot attendants or in a warehouse around forklifts.
- Performance Class 2: the minimum level of visibility for workers on a roadway.
- Performance Class 3: provides a higher level of visibility for workers on a high-volume or high-speed roadway or when operating in front of a complex, busy, or distracting background.
- Performance Class E: is for supplemental high-visibility apparel such as pants, hats, or bib overalls. In itself, Class E does not meet Performance Class 2 or 3 criteria.

Employers must select the proper Type and Class of apparel for the hazards and situations to which their workers will be exposed. **A best practice is that all workers reasonably expected to work on a roadway be provided with Type R, Class 3 garments.** New Jersey has the most congested roads in the nation, and workers should be provided with the highest level of visibility.

Safety equipment manufacturers have a wide range of Class 3 apparel from which to choose to meet your needs. Work with your supplier and employees to select the best color(s), style, and size. Oversized or undersized personal protective equipment can present an additional hazard and is not permitted under OSHA Subpart I Standards on personal protective equipment.