



Date: May 24, 2024

To: Doug Connett, MBTA Chief of Infrastructure

Megan Chann, MBTA Deputy Chief of Engineering and Maintenance

From: Nancy Prominski, MBTA Deputy Chief Safety Officer

Subject: Approval of Upper Body Reflective Garments Proposed by MBTA Engineering &

Maintenance

MBTA Division of Engineering & Maintenance (E&M) requested the review and approval of four reflective upper-body safety garments (short sleeve shirt, long sleeve shirt, mock neck quarter zip, and welding jacket) that can be worn when accessing the ROW in place of the standard reflective vest and compliant winter jacket. The proposed upper body safety garments meet and, in some areas, exceed the minimum personal protective equipment (PPE) requirements established in Special Order 22-224 for reflective upper body garments worn on the rail Right of Way (ROW). Landon Acriche, E&M Director of Policy, Strategy, and Oversight, and E&M safety consultant Beth Comeau DiPietro presented the request to the MBTA Safety Management Review Committee (SMRC) on April 24, 2023. Photographs of demonstration garment prototypes and the manufacturer's specifications were presented. Mr. Acriche also presented the request for informational purposes at the monthly Executive Safety Performance Management Review meeting on May 3, 2023.

Based on a review of the information presented by E&M and a unanimous vote by the SMRC and the CSO on April 24, 2023, it was determined that the specifications for the upper body garments meet and, in certain areas, exceed the minimum ROW PPE requirements and can be worn by employees entering and working on the ROW. This approval extends to any MBTA employee or contractor. This approval is granted not just for the particular manufacturer and model of the demonstration garments but also for any like upper-body garment meeting or exceeding the minimum ROW PPE requirements. However, consistency and standardization across PPE is encouraged. Examples of the approved upper body reflective garments are attached to this approval.

A summary comparison of the minimum ROW PPE requirements for upper body safety reflective garments and the E&M proposed upper body garments is presented in the following table.

Minimum ROW PPE Requirements for Upper Body Safety Reflective Garments – Special Order 22-224		E&M Proposed Upper Body Garments – Comparison to Minimum ROW PPE Requirement
1.	ANSI/ISEA 107	Meet the requirement
2.	High Visibility	Meet the requirement
3.	Yellow-Green	Meet the requirement
4.	Retro-Reflective	Meet the requirement
5.	Class 2	Exceed the requirement – all four garments are Class 3
6.	Type R	Meet the requirement

(required for vest only)	Not applicable – upper body garments are short and long sleeve shirts/tops and a long-sleeve jacket that do not possess the catch hazard that a loose-fitting vest poses when working alongside moving equipment
8. "X" stripe on the back	Meet the requirement

Other benefits identified for the proposed upper body reflective garments include:

- Reflectivity: Garments meet a higher reflectivity standard of Class 3 than the minimum ROW PPE requirements
- AR-rated for certain garments based on the job task. Certain garments may be arc-rated (AR), and will be NFPA 2112 and 70E compliant
- FR-rated for certain garments based on the job task. Certain garments may be flame-resistant (FR) and will meet ASTM F1506 standards
- Heat Stress Reduction: Garments will reduce the potential for heat stress during the summer months and hot work activities as workers will not have to layer a safety vest over existing clothing,
- Comfort: Shirts are made of moisture-wicking fabric
- Compliance: Garments can be worn in place of a reflective safety vest or in combination with a safety vest, which enhances the employees' ability to comply with the minimum PPE requirements and remain visible and safe while working
- Longer Wash Life Cycle: The shirts' wash life cycle is 100 washes, which exceeds the reflective vest wash life cycle of 25 washes

E&M agreed to provide instructions to the employees on the purpose and maintenance of the upper body garments and to supervisors on checking to ensure the garments are replaced when reflectivity starts to wear off.

Please contact Ian Stoddard or Nancy Prominski in the Safety Division with any questions.

Examples of Approved Upper Body Reflective Garments



Long Sleeve Shirt



Short Sleeve Shirt



Mock Neck Quarter Zip



Welding Jacket