# METROLINX PERSONAL PROTECTIVE EQUIPMENT

**STANDARDS** 



Document Title	Metrolinx Personal Protective Equipment	Revision	7.1
	Standard		
Document ID	EHS-PPE-2020	Date	May 21, 2021

# Metrolinx Personal Protective Equipment Standards

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Document Owner	Martin Gallagher, Chief Safety Officer	

# Approvals

This standard has been approved by the following stakeholders:

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Name	Position	Approval Date	Signature
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Matt Clark	Chief Capital Officer	May 21, 2021	Matt Clark
Ian Smith	Chief Operating Officer	May 21, 2021	rha

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# **RECORD OF REVISIONS**

	REVISION HISTORY				
Date	Revision	Initiated by	Revision History		
February 13, 2019	1.0 (Initial)	Vice President, Safety & Security			
		Senior Manager, Track & Structures, Corridor Maintenance, Capital Projects Group			
		Senior Manager, Construction Safety			
July 22, 2019	2.0	Senior Manager, Construction Safety	Added the Summary of Key PPE Changes section.		
December 18,	3.0	Senior Manager,	Update to stakeholder list.		
2019		Construction Safety	Clarification of PPE requirements for Metrolinx employees and high-visibility wear.		
March 18, 2020	4.0	Manager, Construction Safety	Class 3 change: Reflective stripes must be present and visible on the arms for Class 3 clothing High Visibility Garment change: "High visibility garments must be completely bright yellow" to "High visibility garments must be bright yellow"		
May 20, 2020	5.0	Manager, Construction Safety	Section 8: COMPLIANCE added: Full compliance to these standards is required by September 15, 2020.		
June 5, 2020	6.0	Manager, Construction Safety	Incorporated applicable comments from stakeholders.		

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September 10, 2020	7.0	Executive Assistant, Safety	Revised Compliance Date from September 15, 2020 to January 31, 2021.
May 21, 2021	7.1	Director, Safety Standards and Practices	Revised Section 7.7 clarifying upper body PPE types

#### LIST OF ACRONYMS

COO	Chief Operating Officer
CCO	Chief Capital Officer
CSO	Chief Safety Officer
СТО	Commuter Train Operator (ie. train conductor)
ESMS	Enterprise Safety Management System
FR	Flame Resistant
HSE	Health, Safety, and Environment
HSVA	High Visibility Safety Apparel
ISO	International Organization for Standardization
(M)SDS	Material Safety Data Sheets
NIOSH	National Institute for Occupational Safety and Health
NRR	Noise Reduction Rating
OHSA	Occupational Health and Safety Act
PPE	Personal Protective Equipment
PAPR	Powered Air Purifying Respirator
QCTO	Qualified Commuter Train Operator (ie. train engineer)
ROW	Rail Right of Way
SMS	Safety Management System
SCBA	Self-Contained Breathing Apparatus

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#### **TERMS AND DEFINITIONS**

Definitions in the Occupational Health and Safety Act (OHSA) and Regulations

A term used in this Standard which is defined by the Ontario OHSA or regulation made under, has the same meaning herein as in the Act or regulation, unless a different specific definition is provided in applicable terms below.

# Applicable Terms

Construction	means the common usage of the term in its broadest sense, and includes the meaning of the term as it appears in the Ontario Occupational Health and Safety Act, that being: erection, alteration, repair, dismantling, demolition, structural maintenance, painting, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a Project but does not include any work or undertaking underground in a mine.
	The terms "Construction" and "Project" need to be read together. Where an activity within the definition of "Construction" is being performed on an object within "Project" the matter is a construction project.
Contractor	is an individual, person or entity, engaged under contract by Metrolinx, or a third party, to provide Construction or Maintenance services within Metrolinx Property. A Contractor can include a General Contractor or Project Company.
Constructor	is defined in the OHSA as a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer. The constructor is generally the person who has overall control of a project.
Construction Site	see "Project Zone".
Emergency	a serious, unexpected, and potentially dangerous situation requiring immediate action.
General Contractor	is the individual, person or entity, engaged under contract by Metrolinx to provide Construction services within Metrolinx Property who is solely responsible for performing the work it is contracted to perform and is identified as the "Contractor" in the contract.

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GO or GO Transit  Industrial Area	is a Division of Metrolinx and usage of the name GO or GO Transit on any document or sign is deemed to be a reference to Metrolinx and a document or sign is not invalid or ineffective by reason only that it uses such name.  is a non-office setting that includes but not limited to workshops, machine shops, equipment testing facilities, maintenance facilities, any facilities or workplaces where electrical work, cutting, grinding, shaping, drilling and finishing activities occur by hand tool or
Metrolinx	mechanical, pneumatic or hydraulic means.  is an agency of the Government of Ontario and includes GO Transit, Presto and UP Express.
Metrolinx Property	see "Property" definition.
Project	means the common usage of the term and includes the meaning of the term as it appears in the Ontario Occupational Health and Safety Act, that being a Construction Project, whether public or private, including:  • the Construction of a building, bridge, structure, industrial establishment, mining plant, shaft, tunnel, caisson, trench, excavation, highway, railway, street, runway, parking lot, cofferdam, conduit, sewer, water main, service connection, telegraph, telephone or electrical cable, pipe line, duct or well, or any combination thereof;  • the moving of a building or structure; and  • any work or undertaking, or any lands or appurtenances used in connection with Construction.  The terms "Construction" and "Project" need to be read together. Where an activity within the definition of "Construction" is being performed on an object within "Project" the matter is a construction project.
Project Site	is synonymous with the geographic boundaries of a specific project's limits.
Project Zone	means a specific area (zone-delimited) within the Project Site, having boundaries defined by the contract, approved contractor site specific safety plans and/or the Metrolinx Safety Department, which is the primary area of operations for that General Contractor.

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Property	also referred to as "Metrolinx Property" in this Standard, means real estate, owned or leased, including but not limited to train and bus facilities, train and bus stations and parking lots.		
Railway Operating Crews	means CTOs, QCTOs, Customer Service Ambassadors, Transportation Officers and Supervisors.		
Rail Equipment	means a machine that is constructed for movement on lines of railway, whether or not the machine is capable of independent motion or a vehicle that is constructed for movement both on and off lines of railway while the adaptations of that vehicle for movement on lines of railway are in use.		
Railway Corridor or Right of Way (ROW)	refers to the Metrolinx-owned and operated on subdivisions of railway infrastructure, rail/maintenance/layover yards, and all property between property fences, or if no fences, everywhere within 15m from the outermost rails.		
Work Operation	includes any Construction Project, Operations or Maintenance activity.		
Worksite	means one of multiple work areas within a Project Zone under the control of a General Contractor for that Project Zone. A Worksite can be further defined by the presence of the General Contractor's personnel carrying out work.		

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#### METROLINX'S CUSTOMER AND SAFETY CHARTER

A successful safety program requires the active participation of employees at all levels of the organization.

The Metrolinx Safety Charter is an enterprise-wide commitment that assigns personal ownership of safety to each employee to cultivate a culture of safety at all times. Ensuring safety is top-of-mind for all employees in the workplace and at home is a top priority.

We must be vigilant in identifying safety concerns and act proactively to manage them as quickly as possible. The Safety Charter commits all employees to better identify potential improvements to keep our workplaces, systems and services safe and promotes continuous improvement.



# **OUR CHARTER**

# **Our customer promises**

To do our best to be on time

To always take your safety seriously

To keep you in the know

To make your experience comfortable

To help you quickly and courteously

# **Our safety promises**

To keep myself and everyone around me safe at all times

To act and make unsafe situations safe

To learn from safety incidents and to help others learn too















# METROLINX GO PRESTO UP

Health, Safety and Environmental Policy

Management has committed to a Health, Safety and Environmental (HSE) Policy in an effort to bring these elements to the forefront of decision-making and support its employees in fostering a culture of safety. A copy of the latest policy can be found on Metrolinx's Employee Intranet Portal, MyLinx.

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#### INTRODUCTION

This Standard describes the core requirements for Personal Protective Equipment (PPE) Standard. Hazards in the workplace must be recognized, assessed and controlled. The control of hazards has its own hierarchy:

Most Effective	Type of Control	Example	
	Removing hazards from the workplace	Removing a chemical or substituting for a less hazardous chemical	
	Controlling hazards at the source	Guarding, enclosures	
	Controlling hazards along the path Local exhaust ventilation		
	Administrative controls	Policies, procedures, safe work	
		practices	
Least Effective	Controlling hazards at the worker	Personal protective equipment	

While controlling the hazard at the source is the most effective, it is not always possible or practical to provide this type of protection. In these instances, workers must rely on PPE to protect against a hazard.

PPE can be used to protect against physical hazards (e.g. grinding), chemical hazards (e.g. acids, cleaners) and hazardous physical agents (e.g. noise, radiation). Care must be taken to select the PPE that will protect against the hazard.

When PPE is utilized as a control, there are three important factors to consider:

- 1. The PPE must be properly selected to protect against the hazard,
- 2. The PPE must be used/worn properly, and
- 3. The PPE must be maintained properly.

#### 1.0 PURPOSE

While some types of PPE are basic with respect to selection or use, others require more information. This document has been developed to provide guidance in selecting, using and maintaining PPE. It is divided into sections for different types of PPE. Each section has different headings:

- 1. PPE category: the main category of protection such as hearing protection, footwear etc.
- 2. Reference document(s): documents used to provide information about the PPE category.
- 3. Types of PPE: specific types of PPE in the category such as ear plugs or ear muffs.
- 4. Requirements: requirements or specifications for the PPE.
- 5. Uses: the intended purpose of the PPE.

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- 6. Selection: how to choose the correct type of PPE for the task/hazard.
- 7. Maintenance/cleaning: how to clean and maintain the equipment if it is not disposable.
- 8. Additional information: other information about the PPE that is pertinent.

#### 2.0 SCOPE

- 2.1. This standard applies to all activities carried out by Contractors, Consultants or Metrolinx personnel working at Metrolinx facilities, construction sites and railway corridors, including yards and Metrolinx Projects involving other rail infrastructure, whether working on a construction project, maintenance activities or tasks requiring access to a construction project in a project zone. The standard also applies to activities conducted by a Third Party within the Metrolinx Property and visitors where authorized.
- **2.2.** This standard does not apply to external first responders due to an emergency where rail operations have ceased.
- **2.3.** Should a Contractor, Consultant or Constructor have more stringent PPE controls in place, the applicable provisions of that policy or standard shall apply.
- **2.4.** Where a "Constructor" is managing a construction project for Metrolinx as "Constructor" for the project, the policies and standards of the Constructor must meet or exceed this PPE Standard and the Constructor shall enforce same at the construction project.

#### 3.0 HOW TO USE THIS STANDARD

This standard assumes that PPE is required based on potential hazards identified through assessments (job hazard assessment, training needs assessment, risk assessments). The Enterprise Safety Management System has additional guidance on performing these assessments. To determine the type of PPE, refer to the applicable PPE category. If different categories of PPE are required such as eye protection and foot protection, you will need to refer to each category to select the appropriate PPE.

When selecting the PPE required, it is acceptable to increase the level of protection if you wish. However, you may never choose a type a PPE that provides less protection than is specified.

PPE must be selected appropriately for the hazards associated with the work being performed.

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#### 4.0 PPE COMPATIBILITY

When wearing multiple pieces of PPE, users need to be aware of compatibility concerns because wearing one type of PPE must not impede the function of another. An example is safety glasses and ear muffs. The arm of the safety glasses sits on the top of the ear. This may cause the ear muff to not seal properly, exposing the ear to unwanted sound.

#### 5.0 STANDARD VERSIONS

The CSA & ANSI standards are updated on a regular basis. Unless otherwise stated, this document always refers to the most recent version of the applicable standard.

#### 6.0 ORGANIZATIONAL SAFETY ROLES & RESPONSIBILITIES

Many responsibilities for the development and implementation of this Standard have been delegated to an appropriate manager. This section outlines these delegations and the specific roles and responsibilities in detail, in accordance with Ontario Occupational Health and Safety Act.

Metrolinx employees are reminded that:

- as a visitor to an external site (ie. construction site being managed by a "Constructor" for Metrolinx, maintenance or production facility, etc.), Metrolinx employees are expected to comply with both this PPE standard, the site's requirements, and the more stringent requirement where there is duplication; and
- employees present within the rail corridor (including level crossings and public ROW) shall wear the PPE required by this Standard for ROW work in order to provide visibility for themselves and for the awareness of the public and train operators.

#### 6.1. Duties of Constructor

A Constructor shall ensure, on a project undertaken by the constructor that:

- the measures and procedures prescribed by this Standard are carried out on the project;
- every employer and every worker performing work on the project complies with the Ontario Occupational Health and Safety Act and its regulations;
- the health and safety of workers on the project is protected.

#### 6.2. Duties of Employers

An Employer shall ensure that:

the equipment, materials and protective devices as prescribed are

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provided;

- the equipment, materials and protective devices provided by the employer are maintained in good condition;
- the measures and procedures prescribed are carried out in the workplace; and
- the equipment, materials and protective devices provided by the employer are used as prescribed.

#### 6.3. Duties of Workers

#### A Worker shall:

- work in compliance with the provisions of this Standard and the Ontario Occupational Health and Safety Act and its regulations;
- use or wear the equipment, protective devices or clothing that the worker's employer requires to be used or worn; and
- report to his or her employer or supervisor the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself, herself or another worker.

#### No worker shall,

- remove or make ineffective any protective device required by the regulations or by his
  or her employer, without providing an adequate temporary protective device and when
  the need for removing or making ineffective the protective device has ceased, the
  protective device shall be replaced immediately; or
- use or operate any equipment, machine, device or thing or work in a manner that may endanger himself, herself or any other worker.

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# 7.0 PPE STANDARD

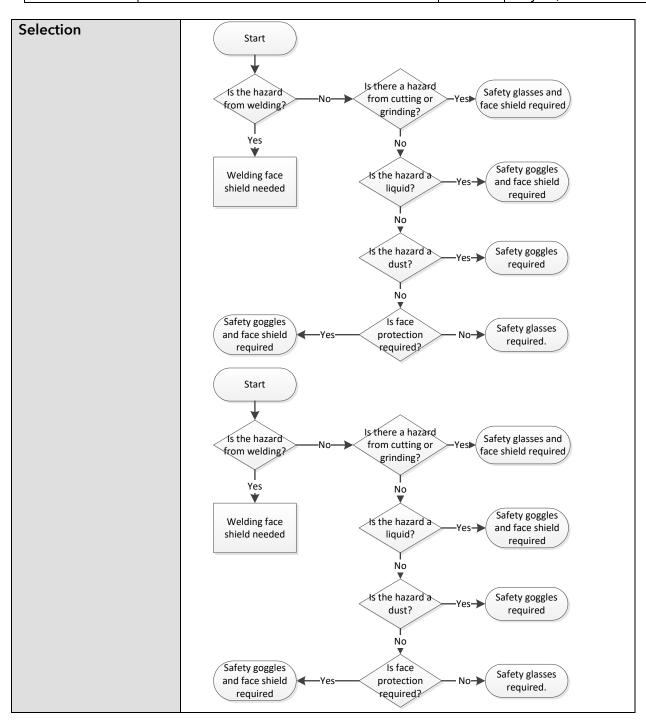
## 7.1. EYE AND FACE PROTECTION

PPE Category	Eye and Face Protection
Reference documents	<ul> <li>CSA Standard, Z94.3, Eye and Face Protectors</li> <li>CSA Standard, Z94.3.1, Selection, Use and Care of Protective Eyewear</li> </ul>
Regulatory Reference	<ul> <li>O. Reg 213/91, s. 24, s. 112(1.2)(b), s. 117(3)(b)</li> <li>O. Reg 851, s. 29(f), s.36(k)(ii), s. 38(b)(ii), s. 81</li> </ul>
Types of PPE	<ul><li>Safety glasses.</li><li>Safety goggles.</li><li>Face shields.</li></ul>
Requirements	<ul> <li>Protective eyewear is mandatory in all Industrial Areas, the rail corridor and construction projects.</li> <li>All protective eye and face protectors must meet CSA standards.</li> <li>All safety glasses must have appropriate side shields.</li> </ul>
Uses	<ul> <li>Safety glasses and goggles are used to protect eyes from impact/contact with particles. The particles may travel towards an employee at high speeds/impacts. Alternatively, particles that are light and float through the air may also make contact with the eye.</li> <li>Face shields are used to protect the face from chemical splash and foreign object contact or impact. It is important to note that face shields provide minimal projectile protection to the eyes. When assessing risk, both safety glasses/goggle AND a face shield must be considered to protect the worker.</li> <li>Eye and face protection can also be used to protect against radiation (lasers, flash from welding).</li> </ul>

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# **⇒** METROLINX

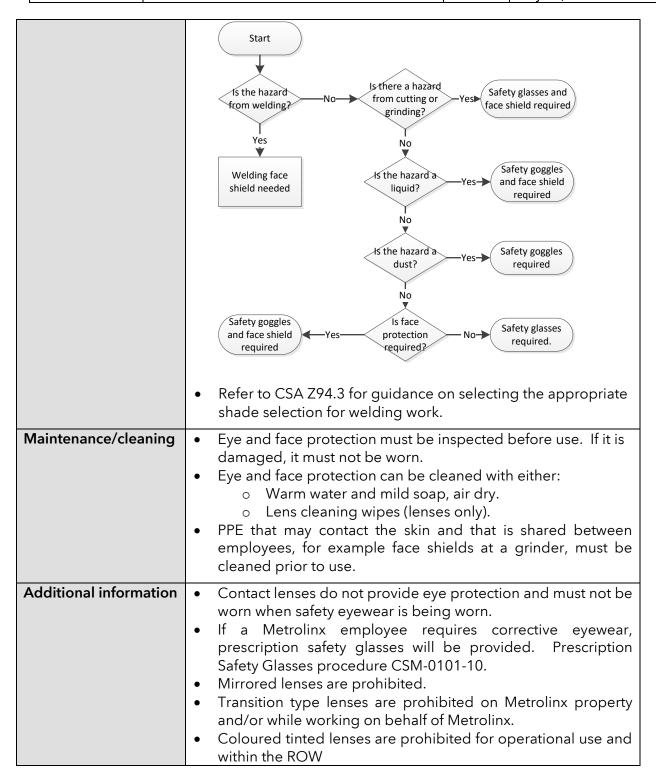
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The protection is required at all times at a project while inside
Eye protection is required at all times at a project while inside
a vehicle or inside the cab of equipment with any window(s)
down or while the cab door is open.
• If prescription safety eyewear is required, CSA approved side
shields must be used with safety eyewear as per manufacturer's
instructions or CSA approved safety eyewear (i.e over glasses)
designed for this application may be worn over prescription
glasses.
Tinted safety lenses should not be used in low light conditions
which can cause poor visibility.

# 7.2. FOOT PROTECTION

PPE Category	Foot Protection		
Reference documents	<ul> <li>CSA Standard, Z195, Protective Footwear</li> <li>CSA Standard, Z195.1, Standard on Selection, Care, and Use of Protective Footwear</li> </ul>		
Regulatory Reference	<ul><li>O. Reg 213/91 s. 23</li><li>O. Reg 851 s. 82</li></ul>		
Types of PPE	<ul><li>Safety boots</li><li>Safety shoes</li></ul>		
Requirements	<ul> <li>Safety boots are mandatory in the rail corridor and on construction projects.</li> <li>Safety shoes where permitted in Metrolinx industrial areas</li> <li>All protective footwear must meet CSA standards for foot protection.</li> <li>Protective footwear used on a construction site or in the rail corridor must be a safety boot style (ankle protection, minimum 6" and a defined heel*).</li> <li>Protective footwear must be appropriate to the work and worn when in public spaces outside of the primary work site. Safety boots are to be properly fastened as per manufacturer's instructions.</li> <li>If protective footwear has laces, the laces must be completely and properly fastened to the top eyelet.</li> <li>Work tasks must be assessed to ensure the proper use of protective footwear. This includes but is not limited to the use of anti-slip foot wear or anti-slip add-on soles to work boots during the winter months.</li> <li>*Ironworkers and steel riggers are exempt from the defined heel requirement while working on steel trusses and I-beams.</li> </ul>		
Uses	Foot protection is primarily used to protect the toes from being crushed and the sole of the foot from being penetrated by foreign objects.		

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	1			
Selection	<ul> <li>A risk assessment for all work occurring outside of industrial areas, the rail corridor, and construction projects must be performed to determine if safety footwear is required. The risk assessment must consider actual and potential hazards of the work location, equipment used and the work being performed.</li> <li>Foot protection must be CSA approved and meet the requirements for a Green Triangle (sole and toe protection) and White Rectangle with orange ohm (Ω, electric shock resistance). Reference images and additional information is provided below.</li> <li>Foot protection must also have slip resistant soles.</li> <li>Metatarsal protection may be required based on a risk assessment of the work performed.</li> </ul>			
Maintenance/cleaning	Wipe with a damp cloth. Ensure footwear is dry before wearing.			
			or to each use, especia ective foot wear must i	
Additional				
information		ear is given in the co	_	
		reen Triangle mear puncture resistant s		grade 1 protective toe
		•		has an electric shock
		ant sole.		
				indicate the types of
		protection built into the footwear. Below shows the main markings seen on the footwear.		
	Marking	R	®	M®
		CSA Green	CSA White	Metatarsal Protection
		Triangle	Rectangle	

# 7.3. HEAD PROTECTION

PPE Category	Head Protection	
Reference documents	CSA Standard, Z94.1, Industrial protective headwear – Performance, selection, care, and use	
Regulatory Reference	<ul><li>O. Reg 213/91 s. 22</li><li>O. Reg 851 s. 80</li></ul>	

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Types of PPE	<ul><li>Hard hats.</li><li>Bump caps.</li><li>Climbing helmets</li></ul>
Requirements	<ul> <li>Head protection is required in all non-construction project related tasks that present a risk of head injury.</li> <li>Hard hats are mandatory on all construction projects.</li> <li>All hard hats must meet CSA Type 2, Class E requirements.</li> <li>Hard hats are to be worn in the proper orientation as per the manufacturer's requirements.</li> <li>Hard hats must be inspected regularly and replaced if they show significant signs of damage.</li> <li>No metallic stickers are permitted on hard hats as they can increase risk of electrical shock.</li> <li>The wearing of baseball type hats and winter headwear, etc. under hard hats is not permitted.</li> <li>Only headwear approved and designed to be worn under hard hats is permitted.</li> </ul>
Uses	Type 2, Class E headwear protects the user against impact to and penetration of the crown and laterally with 20,000 V electrical rating.
Selection	<ul> <li>A risk assessment for all work occurring outside of construction projects and maintenance activities must be performed to determine if head protection is required. The risk assessment must consider actual and potential hazards of the work location, equipment used and the work being performed.</li> <li>Exception: Bump caps can be worn by exception in areas where the risk has been assessed and as approved by Metrolinx Chief Safety Officer and the Director responsible for the subject business unit.</li> <li>Exception: Climbing helmets are only permitted for use when performing climbing, high angle rescue and/or bridge inspections.</li> <li>Red coloured and fashion hard hats (e.g. cowboy hat style) are prohibited.</li> </ul>
Maintenance/cleaning	<ul> <li>Wipe with a damp cloth.</li> <li>Head protection shall be checked for damage before wearing. If the protection is damaged, it must be replaced.</li> <li>Head protection struck by an object should be replaced even if there is no apparent damage.</li> </ul>

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	•	Head protection shall be replaced in accordance with the manufacturer's requirement and as reasonably requested by Metrolinx.
Additional information	•	Hard hats that meet the CSA requirements are designed to absorb a certain level of force directed at the head. However, if the level of force exceeds the ratings of the head protection, it may fail to protect the worker from injury. Other controls should be investigated to reduce the risk.  Bump caps by contrast, are not designed to absorb the force from an object coming in contact with the head protection. They are designed to prevent a workers head from occasional 'bumps' to the head. This can occur in tight spaces.  Consideration must be taken to ensure the head protection will not fall from the workers head. Head protection must be secured at all times. (i.e when working at heights or above other workers)

## **7.4**. HEARING PROTECTION

PPE Category	Hearing Protection
Reference documents	CSA Standard, Z94.2, Hearing Protection Devices - Performance, Selection, Care and Use
Regulatory Reference	• O. Reg 381/15 s. 2-4
Types of PPE	<ul><li>Ear plugs (disposable).</li><li>Ear muffs (reusable).</li></ul>
Requirements	<ul> <li>Hearing protection must be worn when noise levels are 85 dBA or greater. *For planning of job specific tasks, refer to O. Reg 381/15</li> <li>Hearing protection must be worn in areas that are signed as mandatory hearing protection areas.</li> <li>Hearing protection must be worn when working within the arc flash boundary of electrical equipment.</li> <li>Hearing protection must provide adequate protection (see Selection section).</li> <li>To properly insert foam ear plugs:</li> <li>ROLL the earplug up into a small, thin "snake" with your fingers.</li> <li>PULL the top if your ear up and back with your opposite hand to straighten out the ear canal. The rolled-up earplug should slide right in.</li> </ul>

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	3. HOLD the earplug in with your finger. Count to 20 while waiting for the plug to expand and fill the ear canal.
Uses	<ul> <li>Hearing protection is used to prevent damage to the ears and resultant hearing loss. The resultant noise induced hearing loss can be either temporary or permanent. Hearing protection works by providing a barrier and preventing/reducing the harmful noise from entering the ear.</li> <li>Ear plugs are placed inside the ear, whereas earmuffs cover the entire ear. In both cases, if a seal cannot be attained, sound will leak in and reduce the level of protection.</li> </ul>
Selection	<ul> <li>When hearing protection is worn in conjunction with head protection, ear plugs must be worn unless the ear muffs are designed to be worn with head protection.</li> <li>All hearing protection has noise reduction rating (NRR) (see below).</li> <li>To determine if the hearing protector provides adequate protection for ear muffs, the ambient noise level must be less than 85 dBA in calculations outlined in O. Reg 318/15.</li> <li>Employees may choose between ear muffs or ear plugs, based on the task.</li> <li>Ear plugs are lighter, but require more effort to fit properly. Ear muffs are heavier, but require less effort to fit properly.</li> <li>Dual hearing protection (plugs + muffs worn simultaneously) is required at noise levels greater than 105 dBA. To determine if dual hearing protection is providing adequate protection, the calculated noise level must be less than 85 dBA in calculations outlined in O. Reg 318/15.</li> </ul>

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Maintenance/cleaning	•	Ear plugs are disposable and are to be discarded after one use. Generally, reusable ear muffs can be wiped down with a damp cloth and warm water. However, refer to the manufacturer's cleaning/maintenance instructions.
Additional information	•	Facilities/department managers are accountable for erecting signage in high noise environments that exceed 85 dBA. Hands must be clean when inserting ear plugs into ear. Care must be taken not to introduce debris or chemicals into the ear. In work areas where a conversation in a normal voice is difficult to hear, hearing protection must be worn (rule of thumb for >85 dBA noise levels). When using hearing protection consideration must be made for alternative forms of warnings and communications ie. alarms and clearing for trains

#### 7.5. ENVIRONMENTAL PROTECTION

PPE Category	Environmental Protection
Regulatory Reference	<ul><li>O. Reg 213/91 s. 25</li><li>O. Reg 851 s. 84</li></ul>
Reference documents	• N/A
Types of PPE	<ul> <li>Insulated jacket.</li> <li>Insulated pants.</li> <li>Coveralls (insulated or non-insulated).</li> <li>Overalls (insulated or non-insulated).</li> <li>Rain jacket</li> <li>Insect repellent.</li> <li>Tick removal kits.</li> <li>Footwear attachments (e.g. grip / traction devices).</li> <li>Sunscreen.</li> </ul>
Requirements	<ul> <li>Where workers are exposed to hazard due to environmental conditions (e.g. cold weather, insects), the worker shall use or wear protective equipment or clothing appropriate in the circumstances.</li> <li>Short or long-sleeved shirts and long pants made of a durable material, such as denim, cotton duck, or polyester must be worn at a minimum.</li> </ul>
Uses	<ul> <li>Used to keep employee warm in cold weather conditions.</li> <li>To provide protection against insects in the surrounding environment.</li> </ul>

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	<ul> <li>To provide protection again UV radiation from the sun.</li> <li>To prevent/reduce exposure of materials from contact with skin.</li> </ul>	
Selection	Choose clothing based on the weather conditions.  If the employee is working around traffic, the outer layer of clothing must meet the requirements of high visibility safety apparel (HVSA).  If a worker may be exposed to insects, insect repellent must be applied to exposed skin.  If there is a risk of sun burn, sunscreen must be worn on exposed skin. The SPF value will be at least SPF30.	
Maintenance/cleaning	Following cleaning instructions on the garment.	
Additional information	<ul> <li>Following cleaning instructions on the garment.</li> <li>The provision for cold weather wear for unionized employees is given in the collective agreement.</li> <li>Insects such as mosquitos and ticks can be carriers of viruses and diseases such as West Nile or Lyme disease. By wearing insect repellent, this hazard can be greatly reduced.</li> <li>If a tick is found attached to the skin, it must be removed using an appropriate tool. Consider submitting ticks to the local public health authority for testing.</li> <li>Apply insect repellent as outlined according to the manufacturer's instruction.</li> <li>If sunscreen is worn, it should be re-applied every hour. Follow manufacturer's instructions.</li> <li>Leggings or long pants with break away or zip off features and/or mesh behind the knee or at the bottom of the legs is not permitted.</li> </ul>	

# 7.6. RESPIRATORY PROTECTION

PPE Category	Respiratory PPE Protection
Regulatory Reference	• O. Reg 851 46(2)
Reference documents	CSA Standard Z94.4 - Selection, use, and care of respirators.
Types of PPE	<ul> <li>Air purifying respirators (N95, half-face, full-face, or powered air purifying respirator (PAPR)).</li> <li>Air-supplying respirators (supplied air or self-contained breathing apparatus (SCBA)).</li> </ul>
Requirements	<ul> <li>Evaluate the respiratory hazards in the workplace to develop and implement a written respiratory protection program.</li> <li>Respirators are required if engineering controls are not available, not reasonable or practical, are rendered ineffective</li> </ul>

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	<ul> <li>due to temporary breakdown, or are ineffective due to an emergency situation.</li> <li>Respirator users shall be fit tested for the model and size of respirator that they are issued.</li> <li>Respirators are issued on an individual basis and shall not be shared between individuals.</li> <li>Provide worker medical evaluations and respirator fit testing.</li> <li>Only NIOSH approved respirators must be used (e.g. not a dust mask).</li> </ul>
Uses	<ul> <li>Protect workers from exposure to hazardous chemical or biological agents.</li> </ul>
Selection	<ul> <li>Select and provide appropriate respirators and/or respirator cartridge for the hazard considering the concentration &amp; phase of the contaminant(s), task performed, task duration, and suitability of the respirator to the user.</li> </ul>
Maintenance/cleaning	<ul> <li>Provide for the maintenance, storage and cleaning of respirators.</li> <li>Perform pre-use positive and negative pressure checks.</li> <li>Regularly check the end-of-life service indicator (if applicable)</li> <li>All respiratory protection must be stored in accordance with manufacturer's instructions.</li> </ul>
Additional information	<ul> <li>When there are respiratory hazards at your jobsite, your employer must prioritize several methods to reduce your exposure to them, including:         <ul> <li>engineering controls (such as local exhaust ventilation);</li> <li>work practice controls (such as using wet-cutting techniques); and</li> <li>administrative controls (such as minimizing the number of workers exposed to the hazard).</li> </ul> </li> </ul>

# 7.7. PROTECTIVE CLOTHING

PPE Category	High Visibility Safety Apparel (HVSA)
Regulatory Reference	<ul> <li>O. Reg 213/91 s. 25, 69.1(1)</li> <li>O. Reg 851 s. 84</li> </ul>
Reference documents	<ul> <li>CSA Standard Z96, High-Visibility Safety Apparel.</li> <li>CSA Standard Z96.1, Standard on Selection, Use, and Care of High-Visibility Safety Apparel.</li> </ul>
Types of PPE	<ul><li>Jackets.</li><li>Shirts</li></ul>

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	<ul> <li>Safety Vests.</li> <li>Coveralls.</li> <li>Overalls</li> <li>Pants must be full length, with no significant rips or tears, of a material that provides sufficient abrasion protection for the task</li> <li>Leggings or long pants with break away or zip off features and/or mesh behind the knee or at the bottom of the legs is not permitted.</li> </ul>
Requirements	<ul> <li>Mandatory class 3, level 2 HVSA must be worn. Jackets, shirts and long or short sleeve T-Shirts must meet these requirements. Full length pants must be worn at all times for work within the rail corridor, and/or</li> <li>Where determined by risk assessment, workers are exposed to a risk of injury from moving vehicles / equipment, powered mobile equipment and/or due to the worker not being visible to other persons because of environmental or other conditions.</li> <li>All PPE must be worn in accordance with manufacturer's requirements.</li> <li>Exception: Locomotive operators (CTO, QCTO) are permitted to don class 2 level 2 while working in the rail corridor.</li> <li>Exception: In the event of an emergency, Transit Safety first responders are not required to wear class 3, level 2 HVSA.</li> <li>Mandatory class 2, level 2 HVSA or higher is required for work on construction projects and Metrolinx industrial areas where determined by risk assessment.</li> </ul>
Uses	Wearing HVSA makes the user easier to spot when working around traffic, moving vehicles or low light conditions.
Selection	<ul> <li>Outside of construction sites and the rail corridor a risk assessment must be performed to determine the class of HVSA that is required. The risk assessment must consider actual and potential hazards of the work location, equipment used and the work being performed.</li> <li>For employees (such as electricians) that work in areas or around equipment where there is a risk of arc flash, the HVSA must be class 3, level flame resistant (FR; see description below).</li> </ul>
Maintenance/cleaning	<ul> <li>Clean as per directions on the garment.</li> <li>Old or contaminated HVSA that no longer adhere to the requirements of CSA Z96 are not to be worn.</li> </ul>

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Additional information	•	The style of HVSA is based on the nature of the task being
		performed and operational needed. HVSA can in in the form of
		vests, jackets, coveralls etc.
	•	High visibility garments must bear the appropriate CSA tag.
	•	CSA Z96 recognizes three classes of HVSA:
		<ul> <li>Class 3 provides the greatest body coverage and visibility</li> </ul>
		under poor light conditions and at great distance
		(typically arm and leg stripes). Class 3 is mandatory when
		accessing rail corridor. For the purposes of this document,
		Class 3 means reflective stripes must be present and
		visible on the arms for Class 3 clothing.
		<ul> <li>Class 2 provides moderate body coverage and superior</li> </ul>
		visibility.
		<ul> <li>Class 1 provides the lowest recognized coverage and</li> </ul>
		good visibility.
	•	Additionally, CSA recognizes three levels for the material used
		for retroreflective striping on the garment:
		<ul> <li>Level 2 provides the highest retroreflective performance,</li> </ul>
		visible under dark conditions from a great distance.
		<ul> <li>Level 1 provides high retroreflective performance, visible</li> </ul>
		under dark conditions from a moderate distance.
		<ul> <li>Level FR provides special low-level retroreflective</li> </ul>
		performance appropriate only for apparel designed to
		provide protection against brief exposure to flames and
		electrical arc flash.
	•	High visibility garments must be fluorescent yellow or fluorescent
		orange in colour. No other colour is permitted.

# 7.8. FLAME RESISTANT (FR) CLOTHING

PPE Category	Flame Resistant (FR) Clothing	
Regulatory Reference	• O. Reg 213/91 s. 25	
	• O. Reg 851 s. 84	
Reference documents	Metrolinx Electrical Safety Program	
	CSA Standard, Z462, Workplace Electrical Safety	
Types of PPE	Shirts.	
	Pants.	
	Aprons.	
	Standard and bib overalls.	
Requirements	• Flame resistant outerwear and other protective equipment.	
	Appropriate to the hazard is required where workers are	

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	exposed to the hazard of a flash fire or electrical equipment flashover (arc flash).	
<ul> <li>FR clothing is used to protect against burns, a flash fir electrical equipment flash over.</li> <li>Tasks that produce significant sparks, such as cutting, and welding shall be considered for mandatory flame clothing for operators that perform these tasks.</li> </ul>		
<ul> <li>Selection</li> <li>Selection of FR clothing must be based on a risk asset</li> <li>If working around moving equipment or traffic, the must also need to meet requirements for HVSA.</li> <li>Electrical safety PPE must adhere to CSA Z462 - Electrical Safety.</li> </ul>		
Maintenance/cleaning	ce/cleaning • Refer to manufacturer's cleaning instructions	
Additional information	<ul> <li>The provision for FR clothing for unionized employees is given in the collective agreement.</li> <li>FR clothing that is contaminated with grease or fuels is not to be worn.</li> </ul>	

# 7.9. SKIN PROTECTION

PPE Category	Skin protection
Regulatory Reference	• O. Reg 213/91 s. 25
	• O. Reg 851 s. 84
Reference documents	ANSI 105 - Hand Protection Selection Criteria
Types of PPE	Gloves.
	Aprons.
	• Coveralls.
	• Smocks.
	Sleeve covers.
	Barrier creams.
	Rubber gloves.
	Leather protectors.
Requirements	• Where workers are exposed to a hazard of injury from contact with their skin, they shall wear sufficient apparel to protect the worker from injury.
	• It is imperative that the glove or chemical protective clothing material compatible with the potential exposure to chemicals.
Uses	Hand/skin protection is used to prevent materials or chemicals from coming in contact with the skin.

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Selection	<ul> <li>Skin protection can also be used to protect against:         <ul> <li>Cuts, scrapes, lacerations.</li> <li>Hot or cold temperatures.</li> <li>Needle punctures.</li> <li>Absorption of materials through the skin.</li> <li>Electrical contact.</li> </ul> </li> <li>Long sleeves may be needed to protect the skin, based on assessing the level of exposure and the type of work being conducted.</li> <li>If working with chemicals, wear gloves and apron of a material that is impermeable to the chemical. Consult the (M)SDS for an appropriate material for the gloves.</li> <li>If there is a risk of the chemical splashing or coming in contact with the torso, an apron must be used. Consult the (M)SDS for an appropriate material for the apron.</li> <li>If there is a risk of the chemical splashing or coming in contact with the forearms, sleeve covers or gloves with long cuffs must be used. Consult the (M)SDS for an appropriate material for the apron.</li> <li>Suitable eye protection sufficient to prevent ocular injury from liquid splashes, airborne dust, or projectiles shall be selected and</li> </ul>	
	worn. To protect against cuts, scrapes, lacerations etc., work gloves can be used. Gloves should meet ISEA/ANSI standard for cut levels based on risk assessment.	
Maintenance/cleaning	Refer to glove manufacturer recommendations.	
<ul> <li>Refer to glove manufacturer recommendations.</li> <li>Additional information</li> <li>Cotton work gloves are porous and will soak up liquid come in contact with. They are not suitable for use without the policy of the</li></ul>		

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•	Skin protection (gloves, aprons) can also be used to protect
	against electrical shock/contact. Refer to Metrolinx Electrical
	Safety Program for more information, maintenance and cleaning.

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#### 8.0 COMPLIANCE

8.1. Full compliance to the PPE Standards was required by January 31, 2021.

#### 9.0 REFERENCES DOCUMENTS

- ISO 45001: 2018 Standard "Occupational Health & Safety Management Systems Requirements with guidance for use".
- ATU Collective Agreement
- IAMAW Collective Agreement
- ANSI 105, Hand Protection Selection Criteria
- CSA Standard, Z94.3, Eye and Face Protectors
- CSA Standard, Z94.3.1, Selection, Use and Care of Protective Eyewear
- CSA Standard, Z195, Protective Footwear
- CSA Standard, Z195.1, Standard on Selection, Care, and Use of Protective Footwear
- CSA Standard, Z94.1, Industrial protective headwear Performance, selection, care, and use
- CSA Standard, Z94.2, Hearing Protection Devices Performance, Selection, Care and Use
- CSA Standard, Z94.4, Selection, Use, and Care of respirators
- CSA Standard Z96, High-Visibility Safety Apparel
- CSA Standard Z96.1, Standard on Selection, Use, and Care of High-Visibility Safety Apparel
- Metrolinx Health, Safety and Environmental (HSE) Policy
- Metrolinx Electrical Safety Program & CSA Standard, Z462, Workplace Electrical Safety

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#### 10.0 SUMMARY OF KEY PPE STANDARD CHANGES

There are some significant changes to the PPE requirements for both Metrolinx workers, Contractors, and Railway Operating Crews. The table below outlines the key changes.

Section	Key Changes
	Moved table of contents to page 2
	updated revision history
	<ul> <li>added acronyms</li> <li>CTO - Commuter Train Operator (ie. train conductor)</li> <li>OCTO - Qualified Commuter Train Operator (ie. train engineer)</li> </ul>
Terms and Definitions	<ul> <li>Added "Emergency"</li> <li>Clarified definition of Railway Corridor or Rail Corridor or Right of Way (ROW)</li> <li>Deleted "USRC"</li> <li>Deleted "Zone"</li> </ul>
	Updated customer charter
Section 3.0	<ul> <li>Added Scope</li> <li>Added 2.2 - Re: standard not applying to external first responders</li> </ul>
Section 7.0	Changed locomotive operator to train operator
Section 7.1	Clarified all requirements for safety eyewear under additional information.
Section 7.2	<ul> <li>Added safety shoes for Metrolinx industrial areas</li> <li>Clarified requirements on how to fasten safety boots</li> </ul>
Section 7.3	<ul> <li>Clarified types of head protection which are permitted</li> <li>Made distinction between helmets and climbing helmets</li> <li>Included requirement for risk assessment to determine what type of head protection is required</li> <li>Made changes to the exemptions for hard hat use.</li> <li>Changed headwear to head protection</li> <li>Changed chin strap requirement to ensuring that hard hats will not fall off workers head and secured at all times.</li> </ul>
Section 7.4	<ul> <li>Removed hygiene calculations and added reference to O.Reg 381/15 for hearing protecting requirements.</li> <li>Added requirement to consider adequate hearing protection which will allow user to hear warning bells, whistles, etc. in the rail corridor.</li> </ul>
Section 7.5	<ul> <li>Added overalls (insulated or non-insulated) and rain jacket</li> <li>Clarified types of pants (leggings/mesh) which are not permitted</li> </ul>

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Section 7.6	Clarified requirement for respiratory protection to be stored in accordance with manufacturer's instructions	
Section 7.7	<ul> <li>Requirements</li> <li>Further defined class 3, level 2 to include full length sleeves or short sleet T-Shirt and pants with reflective strips on both the arms and legs</li> <li>Added Exception: Exception: In the event of an emergency, Transit Safe first responders are not required to wear class 3, level 2 HVSA.</li> <li>Deleted unnecessary wording "in the workplace or at the worksite"</li> <li>Added Class 3 and Class 2 PPE requirements as "Determined by rassessment"</li> </ul> Additional Information	
	Replaced "Bright" with fluorescent, deleted "Chartreuse"	
Section 7.7	<ul> <li>Requirements</li> <li>Allowed shirts and T-Shirts that meet Class 3, level 2 standard to be worn on understanding Sections 7.5 and 7.9 are also met when long sleeve protection is required.</li> </ul>	

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