



1.0 INTRODUCTION

The purpose of this standard is to provide guidelines for employees to know when, where and how to use the proper Personal Protective Equipment (PPE).

PPE is an essential safety component when there is potential of injury as a result of an exposure or where a physical, chemical, or biological hazard exists. PPE is an employee's last line of defense and is intended to be combined with other barriers to prevent injury or illness. In most cases, the use of PPE is required by workplace legislation.

2.0 SCOPE

This standard applies to all NB Power employees, contractors, regulatory personnel, and visitors who work in or visit a NB Power owned or operated facility where personal protective equipment is required to be worn.

3.0 REFERENCES

Corporate Safety Manual	Personal protection
NB OHS General Regulation 91-191	Part VII protective equipment
CAN/ CSA-Z94.3-15	Eye and face protectors
ANSI Z89.1-1997	American national standard for industrial head protection
ANSI Z 87.1	Eye & face protection standards
CAN/CSA-Z195-M92	Protective footwear
CAN/CSA Z94.1-15	Industrial protective hard hat-Performance selection, care, and use
CAN/CSA Z94.3.1-16	Guideline for selection, use, and care of eye and face protectors
ANSI/ISEA Z89.1-2014	Industrial Head Protection
CSA-94.2-14	Hearing protection devices – performance, selection, care and use
CAN/CGSB-65.7-M88	Life jackets
CAN/CGSB-65.1	Personal flotation devices
CAN/CSA Z96-15	High-visibility safety apparel
<i>HSEE-03-18</i>	<i>Respiratory Protection</i>
HSEE-03-40	Hearing Loss Protection and Noise

4.0 TERMS AND DEFINITIONS

Personal Protective Equipment (PPE)	Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes,
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	earplugs or muffs, hard hats, respirators, or coveralls, vests and other body protection.
Body Protection	Defined as clothing designed for working applications in an industrial setting. (i.e. work clothes, long-sleeved coveralls; Arc Flash rated clothing, FR coveralls, or in the case of laboratory personnel, long sleeved lab coats).

5.0 ROLES AND RESPONSIBILITIES

5.1 **Employer:**

- Shall provide the PPE required and shall ensure the employee is instructed and trained on the proper use and care.
- Shall inform all employees, visitors and contractors the requirements to conform to this standard and NB Occupational Health & Safety General Regulation 91-191 "*Part VII Protective Equipment*".
- Shall ensure that PPE is tested and certified, if required, arrange for the testing or replacement.
- Shall ensure designated work areas requiring PPE are clearly marked. Safety zones (if applicable) where no PPE is required are also clearly marked.
- Shall ensure all risks presented by the job function, activity and environment have been suitably and sufficiently assessed to determine the PPE requirements.
- Are responsible to ensure contractors and visitors have, inspect, and use adequate and suitable PPE for the task to be performed.

5.2 **Employees:**

- Shall use PPE that is appropriate to the task and the identified hazards.
- Shall use the PPE in accordance with the manufacture's instruction and training received.
- Shall visually inspect PPE before each use.
- Shall report any defective PPE to the employer and immediately remove from service.

6.0 STANDARD

6.1 **General Rule**

PPE is the last form of protection. Priority should always be given to engineered protection (e.g. barriers) and/or administrative controls (e.g. permit, standards, etc.).

- PPE shall be adjusted to fit properly and only used for its intended purpose.
 - Loose clothing shall not be worn while working around moving parts.
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- Long hair, including facial hair, shall be suitably confined to avoid entanglement with any moving parts.

The following areas are exempt from wearing PPE unless work is in progress or is designated as required:

- Offices, lunch rooms, washrooms, lockers
- Control rooms
- Driver and passenger area of vehicles
- Travel way between employee's vehicle and work site
- Work areas designated exempt by a site policy shall be approved by Total Health and Safety prior to implementation.

6.2 Students / Casual

Foot Protection - All casual employees and summer students shall wear appropriately rated safety footwear as their job functions require. Casual employees and summer students are entitled to receive an allowance of \$80.00 to offset the expense incurred in the purchase of safety footwear.

6.3 Contractor Requirements

- Contractors shall provide appropriate PPE for their employees, unless it is stipulated otherwise in the contract.
- Contractor-supplied PPE shall meet or exceed NB Power standards.
- Contractors shall ensure all personnel use and maintain their PPE in a manner that meets or exceeds NB Power's Standard.
- CSA approved safety glasses shall be worn by employees at all times *while carrying out traffic control duties (flaggers)*

6.4 Visitor Requirements

- Visitors or regulatory agency personnel shall adhere to NB Power's PPE requirements for the site that they are on.
 - If visitors provide their own PPE, it shall meet or exceed NB Power standards.
 - Public Tours shall follow a prescribed route that has been assessed to be free of hazards, and approved by Total Health and Safety. Tour routes may be exempt from CSA Grade (A) Footwear. Fully enclosed footwear (no sandals or open toes) is required.
 - The person responsible for the visitor(s) shall ensure they are wearing the proper attire and PPE as well as provide oversight for the visitor(s) at all times while on site.
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6.5 Eye and Face Protection

NB Power will provide safety glasses to all employees. All NB Power employees, contractors and visitors shall wear NB Power approved safety eye and face protection. The minimum NB Power approved eye and face protection shall meet this standard, provincial regulation and to CSA standard CAN/ CSA-Z94.3-15, *Eye and Face Protectors*”

While performing work, when near work in progress or when in an area designated as requiring safety eyewear, the level of eye and face protection shall be appropriate to the hazards arising from the work at hand or as further designated by the person in charge.

When necessary, suitable anti-fogging compound should be made available for use with eye protectors. Sweatbands may be necessary for extreme conditions.

6.5.1 Prescription Safety Glasses

CSA approved prescription safety glasses are provided at no cost to all employees subject to the following conditions:

- At the discretion of local management, prescription safety glasses or over-the-glasses safety spectacles/goggles shall be provided to summer students, casuals, or other short-term employees.
- ***The use of photochromic lenses (which darken when exposed to sunlight) are accepted, however when workers enter a building from outside, they must have clear vision before proceeding.***
- Fixed tint lenses and anti-reflective coatings are permitted only for medical reasons on the recommendation of an optometrist
- Progressive bifocal lenses (seamless bifocal lenses) are permitted.
- Employees are entitled to replace their glasses every two years.

All prescription safety eyewear shall be equipped with permanent affixed side shields and shall meet the performance requirements for high impact resistance as identified in CAN/CSA-Z94.3-15, *Eye and Face Protectors*””. Where available prescription safety glasses should be purchased with an anti-fog coating.

6.5.2 Face Shields

Face shields over safety glasses shall be worn to protect the face and neck from flying particles during work activities such as but not limited to grinding, welding, cutting, chipping, etc.

6.5.3 Chemical Goggles / Chemical Hoods

Chemical burns and toxic injuries can be caused by contact with many substances that have acidic or alkaline properties. Employees working with hazardous chemicals shall use suitable safety goggles, face shields, chemical hoods etc. for the job at hand. Work



locations requiring such protection shall be identified by the local area manager and shall be posted as such. Eye wash stations shall be provided in or near these locations.

Safety glasses cannot be worn in place of goggles.

6.5.4 Protection From Ionizing Radiation

Work requiring special eye protection (i.e., protection from ionizing radiation) shall be identified by the local area manager and the eye protection used shall be in accordance with the Atomic Energy Control Act.

6.5.5 Protection From Non-ionizing Radiation

For non-ionizing radiation work (ultraviolet light, infrared, microwaves and lasers) the employee shall wear properly fitting goggles, face shield, or other adequate eye protective equipment appropriate for the specific task at hand (i.e., arc welding goggle).

Supervisors shall ensure that employees working in the area and not engaged in a welding, cutting, burning or soldering operation, are protected from harmful radiation by providing adequate screening around the operation or by preventing the employee's entry to the area where the operation is being conducted.

6.6 Head Protection

All NB Power employees, contractors, and visitors shall use CAN/CSA Z94.1-15 *Type 1 Class E*, ANSI Z89.1-2003 *Type 1 Class E* or equivalent approved hard hat.

The hard hat shall be worn as designed with the peak in front and suspension worn in the proper direction. For welding activities, if it becomes necessary to wear the hard hat with the peak in the rear, the suspension shall be reversed so that it is orientated properly.

Safety headwear and headband assembly shall not be defaced or altered in any manner. If the headwear is cracked or otherwise damaged, it shall be replaced. Headwear shall be inspected by the wearer at the beginning of each workday or shift, for cracks, signs of impact or rough treatment. Shells and suspensions shall be kept clean and maintained in excellent condition at all times and any defective parts shall be replaced immediately.

Only approved accessories shall be worn with hard hats. These include but are not limited to earmuffs, communications equipment, and face shields, all of which attach to the slots on the side of a hard hat. Non-metallic chin straps, fire retardant (FR) rated winter liners, and welding caps/bandanas are permissible.

Chin straps, helmet liners, and hearing protectors shall not be stored on the outer shell while working in the vicinity of an energized line or apparatus.

Headwear can be worn under the hard hat as long they do not adversely restrict vision or affect the proper fit, form, function, or protective capabilities of headwear. Baseball hats

are prohibited.

Ensure a chin strap is utilized when required to ensure the correct fit and placement of hard hats during activities in high winds, tight spaces or awkward body positions that pose a risk to the PPE slipping or falling off.

NB Power employee's name should be affixed to the hard hat, by means of a non-destructive non-conductive labeling tape. It is also recommended that the employee's job title be labeled.

Ensure the placement of stickers on hard hats does not negatively affect the safety performance of the hard hat. However, the location and quantity of stickers applied may prevent workers from correctly inspecting their equipment. The area of the helmet covered should be kept to a practical minimum to permit regular inspection of the helmet shell for signs of damage due to use or aging.

Paints, inks, and inappropriate markings shall not be applied to hard hat, as it may have a detrimental effect on protective capabilities.

In order to obtain optimum protection against electric shock, headwear must be as clean and dry as practicable. Headwear that is wet or contaminated with oily matter or other conducting chemicals, or that is fitted with inappropriate accessories, may suffer significantly reduced protective capabilities.

6.7 Foot Protection

All NB Power employees or contractors shall wear Canadian Standards Association (CSA) approved protective Electric Shock Resistant (ESR) footwear in good condition, while on NB Power property or while performing work on behalf of NB Power.

Under certain circumstances, and for specific job classifications, other types of safety footwear may be approved based on a hazard analysis and consultation with the Total Health & Safety Department.

- Footwear shall have sole protection and Grade 1 toe protection as per CSA Standard Z-195-M92. Footwear that has the required sole and toe protection is marked with the distinctive external green CSA triangle.
 - Electric Shock Resistant Soles - Footwear with electric shock resistant soles will be identified with a rectangular white patch and orange Greek Omega symbol (Ω) attached to the outside of the right shoe or boot.
 - Those engaged in work tasks on a project (construction) site shall wear footwear which provides protection above the ankle.
 - Leather or similar footwear may not be appropriate for some chemical exposures. When chemical exposures are anticipated refer to the Safety Data Sheet (SDS). If adequate information is not available contact the Total Health & Safety Department.
 - Ice cleats are a mandatory piece of equipment that must be on workers winter footwear
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and utilized when conditions call for it. These cleats are only going to aid in slip/fall prevention if you have the right mindset and focus on the task to walk safely. The type of cleats chosen should match the task that you are doing (full sole, heel, or mid-boot).

When to wear ice cleats?

- Monitor flash freeze temperatures (usually morning or evening have the highest risk of ice formation on ground)
- Ground surface is covered in ice or patchy with ice
- At the direction of your Supervisor for the purpose of work
- In terms of upgrading your work boots/shoes, any sign of damage to the toe cap or mid-sole it should be replaced.

6.8 Body Protection

Where an employee is exposed to a hazard that may injure the skin, the employee shall use, as necessary adequate body covering. Potential hazards to exposed skin of employees working on construction projects include abrasions, cuts, exposure to chemical irritants, etc.

Long pants must always be worn when working on construction sites, forestry operations and in the plant environment.

Arc flash protective clothing and associated PPE are required when work is being performed within the arc flash boundary. It is also required when working on any pole that is energized. When the task requires the individual to interact with energized equipment or expose themselves to energized equipment the same applies.

Arc-rated garments shall be constructed of inherently flame resistant fabric or fabric treated for permanent (normal life of the garment) flame resistance and the level of protection, or the arc rating, shall be identified on the garment. The arc rating may vary from one garment to another, and therefore it is important that the individual is knowledgeable on identifying the arc rating of their garments to ensure sufficient protection against the hazard. The arc rating of the garment is identified on the manufacturers tag and should be expressed as ATPV or Ebt.

Non-melting clothing shall be worn under an arc-rated clothing. Arc-rated clothing shall cover potentially exposed areas as completely as possible.

6.8.1 Chemical and Welding Aprons, Sleeves and Leggings

- Welding aprons, sleeves and leggings shall be flame retardant work clothing and an apron of leather or other material offering equivalent protection (100% cotton).
 - They should provide protection against heat and molten particles.
 - They should be worn during hot work.
 - Chemical protective clothes such as aprons, sleeves and leggings are made of
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different material according to the product they protect against. Refer to SDS to determine the most appropriate type to be worn (Nitrile, Vinyl, etc.).

- Disposable coveralls are also available and maybe needed during specific tasks. A risk assessment should be conducted in order to determine any additional PPE requirements.

6.8.2 High Visibility Clothing

- High visibility vests or clothing shall be worn when working on or near roadways, on construction sites, working around heavy equipment as well as in the woods during hunting season or whenever the person in charge deems it necessary for the safety of the workers.
- High visibility vests for traffic control persons (flaggers) are to be orange as per the motor vehicle act.
- High visibility vests shall be worn by the signaler during crane operations. If other persons with high visibility vests are present, the signaller must be distinguishable from the other workers by using techniques such as wearing a different colour vest or arm bands, etc.
- High visibility vest must be fitted or tear away.

6.9 Life Jackets / Personal Flotation Devices

For operations on, over or near water the following shall be used.

- A life jacket that conforms to Canadian General Standards Board (CGSB) standard CAN/CGSB-65.7-M88, “Life Jackets, Inherently Buoyant Type”
- A personal flotation device that conforms to CGSB standard CAN/CGSB-65.11-M88, “Personal Flotation Devices”
- An automatically inflatable personal flotation device that meets UL1180-95, “Fully Inflatable Recreational

The shell of a life jacket or flotation device referred above shall be bright yellow, orange or red and have retro-reflective material fitted on surfaces normally above the surface of the water.

Before and after use, it is the responsibility of each user to verify and inspect their lifejacket, as per manufacturer’s suggested guidelines.

Specific flotation work suits for water operations shall be available for small boat operations. (Storm restoration i.e. Mustang flotation suit)

All flotation work suits should have an attached hood and should seal at the neck, wrists and ankles. Flotation work suits approved by Transport Canada meeting the CAN/CGSB 65.11



6.10 Hearing Protection

Hearing protection shall always be worn in areas where the sound level exceeds 85 dBA, except for employees operating vehicles or other equipment where the use of hearing protection is not permitted. Where employees may be exposed to hazardous noise and hearing protection cannot be used, the exposure to noise shall be controlled by limiting the duration of exposure to acceptable limits, as shown in Table 1, or by other effective controls.

Table 1

Sound Level (dBA)	Maximum Exposure Time
82	16 hours
85	8 hours
88	4 hours
91	2 hours
94	1 hour
97	30 minutes
100	15 minutes
103	7.5 minutes
106	4 minutes
109	2 minutes
112	1 minute
115	No unprotected exposure

The employer shall provide personal hearing protection as necessary for any person working in or near a noisy environment. Noise can create physical and psychological stress and contribute to accidents by making it difficult to hear warning signals. Excessive noise can destroy the ear's ability to hear (Noise Induced Hearing Loss) and ear damage cannot be repaired.

Refer to Corporate H&S Standard HSEE-03-40 Hearing Loss Protection and Noise for more information.

6.11 Hand Protection

Employees engaged in work where there is a danger of cuts, slivers, burns, contact with hazardous materials, exposure to heat and cold, etc., shall wear suitable gloves for hand protection. Select the appropriate size glove.

It is recognised that in some instances, a knife may be the safest and best tool for the job. Knives come in many different shapes and forms, each one designed for a specific purpose



or job. Selecting the correct knife or alternative cutting tools for the job is very important to ensure that the job can be completed correctly and safely and reduce the risk of accidental injury. Employees are required to use appropriate hand protection as required for the task.

Several types of gloves have been identified as pertinent for our operations, they are available through central stores and can be classified as:

- General use or utility gloves
- Heavy duty gloves
- Welding gloves
- Chemical resistant gloves
- Cut resistant gloves
- Specific gloves for microbiological hazards
- Vibration absorbing gloves
- Rubber gloves

6.12 Respiratory Protection

There are different types of respirators, ranging from disposable paper masks to self-contained breathing apparatus with full face masks and air cylinders. When respiratory protection is required, it is important to ensure that the right type of respirator is used. The two basic types of respirators are: air-purifying and supplied-air. All personnel who may be exposed to respiratory hazards shall be trained in the use of respirators, fit tested and clean shaven. Reference the *Health and Safety Respiratory Protection Standard HSEE-03-18 I-6* for further requirements on respiratory protection.

Each site with potential air borne hazards shall have a Respiratory Protection Code of Practice.

For detailed information on the types of respirators and/or cartridges required for specific hazards contact the Total Health and Safety Department.

6.13 Personal Protective Equipment For Utility Arboriculture Operations

- CSA approved safety glasses shall be worn at all times while operating a chain saw or wood chipper. ***Mesh screen/protective visor can be worn as secondary eye/face protection if desired.***
 - All employees or contractors whose job functions require them to use a chain saw while doing work for NB Power, shall wear safety footwear meeting the requirements of CSA standard Z195-M92 "Protective Footwear".
 - CSA approved safety footwear (grade 1 toe protection, sole puncture protection and electric shock resistant soles) shall be worn while employees or contractors work with a brush saw or operate a wood chipper for NB Power.
 - Full chain saw pants which offer protection to the front and back of the leg shall be used by employees or contractors whose job functions require them to use a chain saw
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on a continual basis.

- When employees or contractors perform work for NB Power requiring the use of a chain saw on an intermittent basis, either chaps which offer full frontal and back of the lower leg protection from the top of the safety footwear to the groin or full chain saw pants shall be worn.
- All NB Power employees or contractors shall wear a NB Power approved hard hat while using a chain saw or brush saw or while operating a wood chipper for NB Power.
- All NB Power employees or contractors using or in the immediate vicinity of an operating chain saw, brush saw, or wood chipper shall wear approved hearing protection that provides an adequate noise reduction rating for the equipment in use.
- Only competent employees shall operate, repair, or service chippers, and they shall wear appropriate eye, head, hearing, and foot protection at all times while so engaged. Further, when feeding the chipper, tight fitting gloves and snug fitting clothing shall be worn. Gauntlet style gloves are not permitted.

6.13.1 Personal Protection for Chain Saw Operation from an Aerial Device

- Eye, head and hearing protection as identified in previous rules shall be worn while operating a chain saw from an aerial device.
- Chainsaw foot and leg protection is not required while operating a chain saw from a closed-in aerial device.
- Chainsaw foot and leg protection are required while operating a chain saw from an open-sided aerial device.
- A chain saw shall never be left running and stored in an aerial device (bucket)

6.13.2 Emergency supplies for Chain Saw, Brush Saw or Clearing Saw Operations

Employers shall ensure that an employee has the following emergency equipment readily available.

- suitable fire extinguisher or a round point shovel
- suitable first aid supplies
- pressure bandage on the person.

6.14 Exemptions

Total Health and Safety may grant exemptions to this standard in the form of a deviation.



6.15 Inspection and Maintenance

- PPE shall be used, stored, maintained and replaced as per the manufacturer's recommendations.
- PPE shall be kept clean and in good working condition.
- Each location shall establish an inspection and maintenance schedule with responsible persons defined for conducting maintenance.
 - Fall protection
 - Rubber gloves
 - SCBA's
- Pre-use inspection and maintenance of PPE shall be done by the employee.
- Inflatable lifejackets shall be verified at least once **annually** by a person trained in the manufacturer's approved methods.
- Each location shall file certificates for certified PPE in a central location and a process, implemented to renew certificates or replace equipment before expiry dates.
- Fall protection components shall be inspected by a qualified inspector, no longer than 1-year intervals.

7.0 TRAINING

- Orientation for new employees and contractors, Supervisors review proper PPE use and care
- Specialized training (Respiratory protection, Fall Protection, SCBA's, etc.)

APPENDIX

Appendix A - Obtaining Prescription Safety Glasses

R. Condon

Director of Total
Health & Safety

Health & Safety Standards

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Title:
Personal Protection Equipment (PPE)

DOCUMENT APPROVAL/REVISION RECORD

Revision #	Date yyyy/mm/dd	Revision Summary	Author	Reviewed By	Approved By
New	2019/12-13	older individual PPE standards are combined into this one standard. Added section 7.0 – Training	Nancy Allen	Total H&S Team	Robin Condon





Appendix “A” - Obtaining Prescription Safety Glasses

The following process should be used by employees to obtain prescription safety glasses through NB power’s protective eyewear program.

Employee

- Initiates the process by having the supplier's form completed at their work location with all relevant information. The supplier’s form is located on the Hard Hat site.
- Submits form to supervisor for approval signature and accounting distribution number.

Supervisor

- Approves the purchase of eyewear by signing the supplier's form in the appropriate area and returns the form to the employee.

Employee

- Obtains prescription from his/her optometrist
- Employee presents completed and approved form to Optometrist/Optician which is located on the Hard Hat site.

Optometrist/Optician

- Optometrist/Optician completes appropriate prescription information.
- Provides the selection of the supplier's frames to employee and adds frame style number selected and size to supplier's form.

(Optional)

- If the employee's Optometrist does not carry a complete line of supplier's frames, the employee may choose to use one of the various optical outlets in the province. The employee shall remember to present the supplier's form to the salesperson at the optical outlet to have the frame style number selected and size added to the form.

Optometrist/Optician

- The person who completes the supplier's form with the frame style and size information will be the person responsible to send the completed form to the supplier's office.

Supplier

- When the completed form is received at the supplier's office, the form will be reviewed to ensure that the appropriate information has been provided, including an approval signature.

NOTE:

If any information is missing, the form will be returned to the employee's optometrist or optician for completion. If the approval signature is missing, the form will be returned to the employee's supervisor, thus resulting in a delay for the employee.

- When the glasses are ready, they will be sent to the employee's Optometrist or Optician.

Optometrist/Optician

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- Optometrist/Optician will call and inform the employee that the glasses are in and arrange to have the employee come in for the fitting

Employee

- A fitting (dispensing) fee will be charged to the employee at the time of the visit. The employee can pay the fee and be reimbursed from the employee's work location's petty cash, request for cheque, or weekly expense form, OR if the Optometrist or Optician wishes, they may bill the individual NB Power Business Units

Payment of Eye Examination

- Employee pays the Optometrist in full and submits for reimbursement through NB Power's benefits program "Blue Cross".
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