

# PERSONAL PROTECTIVE EQUIPMENT



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## 1. Scope

The requirements of this Procedure shall apply to all Council workers, including employees, contractors (including agency staff), volunteers and visitors.

## 2. Responsibilities

Position	Responsibility
General Manager	<ul style="list-style-type: none"><li>• Ensure that processes are in place for the review of this procedure and related processes every two years</li><li>• Shall ensure the requirements of this Procedure are adhered to</li></ul>
Directors/Managers	<ul style="list-style-type: none"><li>• Allocate necessary resources for the implementation of this Procedure</li><li>• Monitor the implementation and effectiveness of the procedure</li><li>• Shall ensure the requirements of this Procedure are adhered to</li></ul>
Supervisors	<ul style="list-style-type: none"><li>• Ensure the mandatory requirements of this Procedure are adhered to</li><li>• Conduct site risk assessments in consultation with workgroup to ensure correct selection and use of Personal Protective Equipment other than mandatory.</li><li>• Ensure all workgroup members using Personal Protective Equipment are fully trained in its use and application.</li><li>• Supervise and instruct workgroup members to correctly use Personal Protective Equipment</li><li>• Ensure adequate provision of required Personal Protective Equipment at the worksite</li><li>• Withdraw workgroup members from exposure to risk and initiate disciplinary actions when required against Workers that fail to use Personal Protective Equipment at times when it is required</li></ul>
WHS Officer	<ul style="list-style-type: none"><li>• Consult with key stakeholders in the development and maintenance of this procedure</li><li>• Provide information to Council's management and workers on the correct use of PPE</li></ul>
Workers	<ul style="list-style-type: none"><li>• Ensure the mandatory requirements of this Procedure are adhered to</li><li>• Diligently use and maintain PPE when exposed to the risk the equipment had been prescribed to control</li><li>• Ensure correct storage, maintenance and care for PPE provided to them for their personal protection, and to ensure that it is not subjected to any misuse or abuse</li><li>• Comply with instruction and requirements for use of PPE</li></ul>

## 3. Standard

In managing Personal Protective Equipment (PPE) in the workplace, the use of such equipment will be made on the basis of:

- Mandatory requirements including Work Health Safety Act, Regulations and Codes of Practice
- Procedures, Safe Work Method Statements, Manufacturer Safety Guidelines requirements
- Risk Assessments
- Safety Data Sheet Requirements
- Verbal Instructions

PPE is the lowest method of protection on the hierarchy of control so higher-level risk control measures such as elimination, substitution, isolation, engineering and administrative control measures should be considered first.

PPE can be useful in minimising harm when an incident occurs, but it is very rare that PPE will prevent an incident from occurring in the first place.

Council has a duty of care under the NSW WHS Act 2011 to minimise risk to So Far as Reasonably Practicable. This means that relying solely on PPE as a method of hazard control is not acceptable unless all other controls have been considered first.

All employees are required to ensure that PPE is used as per its design and intended use whenever the use of PPE is identified as necessary to protect them from a hazard. All PPE should be assessed serviceable prior to use. It's important to note that this applies equally to all staff regardless of their role and employment status and is based solely on hazard exposure and risk control.

Outdoor staff will be issued their PPE at Wyrallah Road Depot Stores upon commencement of their employment as per Table 1. When it is identified through risk assessment that indoor staff require the use of operational PPE to safely fulfil their duties, they can also order and receive this PPE from the Wyrallah Road Depot Stores as per Table 2. Additional PPE can be provided, as required, on an as needs basis with prior approval from a Coordinator. Relevant Coordinators are responsible for ensuring these requirements are met and adhered to.

#### Provision of Non-Standard PPE for Workers

Where a Worker chooses to wear specific PPE that isn't an option available from the selection at the Store, they may purchase it themselves.

Upon provision of a valid receipt, verification of compliance to this procedure and approval by the relevant Program Manager a reimbursement form is to be forwarded to Stores. Council will reimburse an amount equivalent to the standard item of clothing available from the Store at the time of purchase.

Labour hire Workers shall be required to be provided with the following Personal Protective Equipment and Clothing by the labour-hire company prior to commencement with Council:

- Work approved boots/footwear (steel capped and consistent with Council standards);
- Hi-visibility long sleeved work shirts;
- Work approved trousers (consistent with Council's standards);
- Broad Brimmed Hat;
- Safety Glasses;
- Ear Protection;
- Sunscreen;
- Hi-visibility raincoat and pants (as required);
- Safety Helmet with Brim (as required);
- Safety Vest/Traffic Control Vest (as required);
- Safety Gumboots (as required).

Specialist PPE will be issued dependant on the tasks and duties undertaken by Workers, including labour hire Workers. Specialist PPE issued to labour hire Workers shall remain the property of Lismore City Council and shall be handed back to the relevant Supervisor upon completion of task or placement.

Deviations from the mandatory PPE shall be through documented risk assessment completed by the Coordinator in consultation with the Workers taking into account the hazards and risks presented and suitable Personal Protective Equipment and Clothing alternatives to reduce the risk to so far as reasonably practicable.

Workers issued with PPE shall be responsible for ensuring that it is used, maintained, and stored in accordance with instructions from the manufacturer/supplier.

Workers are to regularly inspect their Personal Protective Equipment and Clothing and order replacements as required:

- Due to normal wear and tear;
- Should any specific damage occur which compromises the effectiveness of the clothing or equipment;
- Where an item has a specific use-by-date;
- If item is lost.

Workers are to take the relevant item of personal protective equipment or clothing to the Wyrallah Road Depot Store and exchange/replace old for new. Where an item has been lost it will be recorded, and continued losses may result in disciplinary actions.

Workers issued with PPE shall be provided with relevant information, instruction, supervision, and training as required.

#### **4. Mandatory Requirements**

Mandatory requirements for relevant workgroups and specific tasks/activities is summarised in Attachment 2. This list is not exhaustive and at all times the requirements of the following shall be adhered to:

- Procedures, Safe Work Method Statements, Manufacturer Safety Guidelines Requirements;
- Safety Data Sheet Requirements;
- Risk Assessments;
- Verbal Instructions.

If any Worker or supervisor considers that the use of PPE creates a greater risk in any component of their duties (e.g. the use of hard hat brim while working in confined spaces obscures vision) amendments or exemptions must be authorised by the relevant Program Manager/ Coordinator and the authority noted on specific risk assessments. Similar temporary exemptions may also be provided in times where, for example, it is not practicable to have shirt sleeves rolled down.

Where applicable mandatory signage shall be fixed indicating minimum requirements for:

- Area/Workgroup Location;
- Tasks and Activities;
- Plant and Equipment;
- Other as deemed necessary by risk assessment.

#### **5. Records**

Records of issue shall be maintained by the Depot Stores administration system.

**Table 1**

Personal Protective Equipment issued to Outdoor Workers from Stores.

ITEM	REQUIREMENTS	QUANTITY
Long Sleeve Shirt	Hi-Viz (Class D) AS 4602 / UPF 50+ Rated	5
Long Pants	UPF 50 + Rated	5
Winter Jacket	Hi-Viz (Class D/N) AS 4602	1
Safety Boots (general issue)	AS 2210 / Type 1 Heavy Duty Grade 1 Toecap (Steel) Must Cover Ankle	2
Safety Glasses	Medium Impact AS 1337 / AS 1067 (UV) Wrap Around	1
Helmet	AS 1800 / Type 1 Industrial - Yellow / Vented	1
Broad Brimmed Helmet Attachment	UPF Rated	1
Safety Vest	Hi-Viz (Class D/N) AS 4602	1
Sunscreen	SPF 30 + Broad Spectrum	1
Hearing Protection	AS 1269	1
Wet Weather Suit Coat and Pants	Hi-Viz (Class D/N) AS 4602	1
Sun Hat	Broad Brim UPF 50+ Rated	1
Gloves	AS 2161	1
Water Bottle		1

**Table 2**

Personal Protective Equipment issued to Indoor Workers identified by risk assessment from Stores

ITEM	REQUIREMENTS	QUANTITY
Long Sleeve Shirt	Meets the AS 4399 Sun Protection Clothing Classification	3
Long Pants		2
Safety Boots	General Issue AS 2210 Protective & Occupational Footwear	1
Safety Glasses	Medium Impact AS 1337 / AS 1067 (UV) Wrap Around	1
Helmet	AS 1800 / Type 1 Industrial - Yellow / Vented	1
Wet Weather Suit Coat and Pants	Hi-Viz (Class D/N) AS 4602	1
Safety Vest	Hi-Viz (Class D/N) AS 4602	1
Sunscreen	SPF 30 + Broad Spectrum	1
Hearing Protection	AS 1269	1
Sun Hat	Broad Brim UPF 50+ Rated	1

## Attachment 2 – Mandatory Requirements

Task	Eye Protection	Gloves	Hearing Protection	Safety Helmet	Respiratory Protection	Leg Protection	Body protection	Specialized Protection
Plant – working in vicinity of	✓		✓1	✓2	✓3	✓6		
Load shifting plant and equipment with swing zones	✓		✓1	✓	✓3	✓6		
Bitumen works	✓	✓				✓6	Overalls / long pants	
Brushcutter	✓		✓			✓6 Shin guards		
Hand tools	✓	✓4	✓1			✓6		
Power tools	✓		✓		✓3	✓6		
Chainsaw	✓*	✓4	✓	✓		✓ Chaps / or Cut resistant chainsaw pants ✓6		* Safety glasses plus Helmet with mesh face shield
Pole saw	✓	✓	✓	✓		✓6		
Chemical handling and use	As per MSDS requirements, specific specialised training or instruction ✓6							
Concrete cutting saw	✓	✓	✓		✓	✓6		
Confined spaces	As per risk assessment and Entry Permit requirements and in accordance with specialised training ✓6							
Construction sites (PMP jobs)	✓ 5	✓4	✓1	✓2	✓3	✓6		Other as deemed by risk assessment
Maintenance sites	✓ 5	✓4	✓1	✓2	✓3	✓6		Other as deemed by risk assessment
Explosive Power Tools	As per specialised training and instruction ✓6							
Herbicide, Pesticide mixing and spraying	As per MSDS requirements, specific specialised training or instruction ✓6							
Grinding / cutting portable	✓		✓	✓2	✓3	✓6		
Welding	✓*	✓			✓3	✓6	Welding jacket	* Welding mask
Oxy cutting	✓	✓		✓2	✓3	✓6		

Task	Eye Protection	Gloves	Hearing Protection	Safety Helmet	Respiratory Protection	Leg Protection	Body protection	Specialized Protection
Static powered tools grinder drill press lathe bandsaw drop saw	✓		✓1		✓3	✓6		
Mowers	✓		✓1		✓3	✓6		
Hedgers	✓		✓1		✓3	✓6 ✓Chaps		
Hydraulic equipment	✓	✓	✓1	✓2	✓3	✓6		
Pneumatic equipment	✓	✓	✓1	✓2	✓3	✓6		
Vibrating equipment	✓	✓	✓1	✓2	✓3	✓6		

Mandatory minimum requirement for outdoor workers = High top steel capped safety boots; long pants; long sleeve hi viz shirt; eye protection as per table above (medium impact & UV rated); broad brim hat.

Legionnaire style hats may be worn whilst brush cutting to accommodate ear muffs and face shield.

#### Code

- ✓ – Mandatory
- ✓1 – When working with or in near vicinity of noisy plant / equipment that exceeds 85 db
- ✓2 – When risk of objects falling/ overhead works being conducted or working in vicinity of mobile plant (swing zone)
- ✓3 – When working in dusty or contaminated atmosphere
- ✓4 – Ensure gloves are readily available
- ✓5 – When working in dusty or contaminated atmosphere likely to cause irritation to eyes
- ✓6 – Long pants when potential to cause injury to a person's legs, including prolonged UV exposure

\*\*\*\* The above table is not exhaustive and at all times the required PPE must be suitable for the task undertaken and comply with Procedure, SWMS / RA, MSDS, MSG and verbal instruction.

## 6. Personal Protective Equipment and Clothing Guidelines

### Safety Helmets at Work

#### Use of Safety Helmets

Coordinator /Team Leaders are to ensure that all persons wear an approved safety helmet at all times at Council controlled workplaces, where:

- Individuals are exposed to falling objects including those that might be disturbed by plant or equipment
- Where the erection, maintenance, alteration or demolition of bridges or culverts is undertaken
- Excavation or demolition work involving the use of explosives is in progress
- Work involving vegetation clearance where growth exceeds 3 metres in height
- Work is undertaken in trenches greater than 1 metre deep
- Persons work within an elevated work platform
- Dogging and rigging operations are conducted involving cranes, including vehicle-mounted loading cranes, eg. HIABs
- Where any other hazard is identified that could cause an object to contact a persons head or a person's head could foreseeably make contact with a hard object

#### Supply and Replacement of Safety Helmets

Safety helmets are designed to have a limited lifespan and should be replaced as per manufacturer's recommendations or when damage or failure of the helmet or webbing is identified.

Safety Helmets that have exceeded their lifespan are not permitted for re-use for any purpose. They are to be collected and replaced with new helmets on an exchange basis from stores. They should be rendered unusable and then disposed of appropriately.

#### Care and Maintenance Requirements

Care and maintenance of the safety helmet requires the following:

- Safety helmets are cleaned regularly with non-corrosive substances normally water and soap or a damp cloth, harnesses head bands can also be with soap and water or simply replace;
- Safety helmets and all of the components are examined at least weekly for dents, cracks, penetrations, other damage and unauthorised alterations;
- Safety helmets showing any damage to the shell are withdrawn from use and destroyed;
- Safety helmets subjected to substantial impact without showing signs of damage are withdrawn from service and destroyed;
- Safety helmets with sound shells but damaged harness components are to have the complete harness and cradle replaced; and
- Sweat bands are replaced as required.



### Misuse of Safety Helmets

The following practices may be detrimental to safety helmets and affect their integrity or performance:

- Exposing the helmet to excessive heat and solar radiation, such as in vehicle cabins;
- Applying insect repellents, paints and similar solvent-based materials to the helmet;
- Applying insect repellents, paints, solvents, chemicals, adhesives, stickers, gasoline or like substances on safety helmet. These materials can cause deterioration to the shell's ability to withstand impact and penetration.
- Altering or modifying the helmet in any way, such as by drilling holes in the shell;
- Using helmets for purposes other than that for which they are designed;
- Cleaning helmets with petroleum solvents or harsh abrasives;
- Placing objects within the helmet while it is being worn, e.g. cigarette lighters; and
- Installing replacement components that are not of the same manufacture or type as that of the primary item.

### Correct Application of Safety Helmets

For a safety helmet to perform effectively the following must be adhered to:

- Safety helmets with cracks or that have been involved in a stress event are to be replaced;
- The harness and straps must be in good condition and attached in the correct places;
- The harness and straps must be adjusted to suit the user's head;
- When wearing a safety helmet DO NOT wear a cap underneath as it is not designed for this and the fitting of the harness to the head is compromised, thus reducing the effectiveness of the safety helmet;
- When wearing a safety helmet always wear it the correct way – not back to front.

### Re-Issue of Safety Helmets

Safety helmets should not be re-issued. If the hard hat has sustained an impact it may not be visible and should be disposed of.

### **Skin Protection at Work**

Coordinator/Team Leaders are to provide PPE including sunscreen and insect repellent to workers (including predominately indoor workers, contractors, volunteers and agency staff who are required to work outdoors).

Coordinators will reinforce the importance of wearing PPE for the purposes of skin protection during tool box meetings and site inductions.

Workers must use the PPE that is provided to protect them from foreseeable risks associated with, but not limited to, the following:

#### Ultraviolet Radiation (UVR):

- Personnel employed as outdoor workers and are at risk of exposure from solar radiation
- Personnel employed as indoor workers who undertake outdoor work activities where there is a risk of exposure to solar radiation
- Personnel travelling in motor vehicles and plant that are exposed to solar radiation penetrating through windows or openings
- Where biting insects are prevalent, particularly those that are carriers of insect borne disease

## Risk Control Measures

Preference is to be given to higher level controls to eliminate or reduce exposure of individuals to solar radiation or biting insects. It's important to note that there are circumstances where identified PPE to protect against UVR could lead to an increased risk of heat stress.

In these circumstances a risk assessment must be conducted by the relevant Supervisor, in consultation with Workers, to identify reasonably practicable alternative controls to allow workers to conduct their duties in a safe manner.

Other controls may include but are not limited to:

- Limiting the time out in the sun during peak periods of daily UV radiation;
- Providing permanent or temporary shade or solar radiation screening by means of canopies, shelters or physical barriers;
- Employing mechanical devices such as mobile traffic control lights, instead of traffic controllers;
- Implementing administrative practices, such as scheduling and rostering may be applied to reduce exposure times during peak UV radiation periods
- Providing training and information to Workers on the effects of solar radiation
- Conditions that might signal over-exposure to solar radiation or reaction to insects
- Providing ample drinking water in hot conditions
- All new and replacement vehicles and plant where practicable shall be air conditioned and large areas of glass shall be tinted to provide protection from UVR

The mandatory items below support the use of the higher level controls listed above. These include;

- UV protective headwear such as broad brimmed hats and broad brimmed safety helmet attachments with a minimum of 7.5cm brim full circumference. Legionnaire style caps may be used only if the neck sun protector flap is attached at all times. Hats are not required where a person is operating plant in an enclosed cabin that provides adequate sun protection. However, staff must wear a council approved hat if working outside the cabin.
- Safety glasses or goggles meeting the UV protection requirements of AS-1067 (Tinted safety goggles that can be worn over glasses are to be supplied to staff who wear prescription glasses)
- Council PPE or outer garments must be worn in accordance with the requirements of the department. The minimum clothing requirements includes long sleeved shirts (with collars) and long trousers. Clothing must be used in conjunction with, at minimum, SPF30+ sunscreen where any hazard of UV exposure is credible or foreseeable. Sunscreen is to be applied topically in accordance with manufacture directions and recommendations.
- By exception, suitable shorts may be worn if there is no increased risk of injury to a person's legs whilst undertaking their work activities and the use of such shorts is a credible control to minimise other risks. Personnel undertaking activities that have a potential to cause injury to a person's legs, including prolonged UV exposure, must wear long trousers. Suitable shorts must be appropriate in both appearance and functionality to the relevant work area.
- A risk assessment shall be undertaken to determine if suitable shorts may be permitted for a given context. Risk assessments must be endorsed by the relevant Program Manager then submitted to the WHS Department for final approval, prior to personnel wearing shorts.
- Enclosed footwear providing foot protection from solar radiation exposure
- SPF30+ sun screen applied to skin that is exposed to solar radiation

### Special Considerations

When working outdoors, special consideration needs to be given to situations/conditions that are associated with higher rates of UV radiation injuries among workers including, but not limited to, the following:

- Susceptibility of a person to sunburn;
- Certain medical conditions (e.g. albinism, xeroderma pigmentosum);
- The use of photo-sensitising medications by the person;
- Previous exposure, if any, to photo-sensitising chemicals, such as creosote; and
- The use of photo-sensitising chemicals during the work.

Workers are required to inform their supervisor if they:

- Have a condition that prevents them from using sun screens or insect repellents;
- Are suffering from a medical condition or using medication that increases photo-sensitivity.

The Worker is to obtain a medical certificate from the treating doctor to validate the need for temporary workplace restrictions.

### Skin Checks

All outdoor workers (including predominately office based workers who are required to work outdoors) are encouraged to undergo a skin check at least every two years with a recognised skin cancer clinic or medical practitioner.

If these medical assessments aren't bulk billed, Council shall cover the "out of pocket cost" after the Medicare rebate. If further treatment is required after an initial assessment, any costs incurred are not covered by Council.

## **Footwear at Work**

### Selection, Maintenance and Use of Footwear

Coordinators/Team Leaders are to ensure that the required safety footwear as described by this procedure is adhered to.

### Selection of Safety Footwear

Where personal footwear is found by risk assessment to provide insufficient protection to the hazards of their workplace, individuals are to be removed from risk exposure until provided with safety footwear meeting the requirements of the work activity or processes performed at that workplace.

### Prevention of Other Injuries

The selection and use of effective footwear can also help to prevent other injuries commonly associated with slips and falls. These include ankle, knee, and back injuries from body-stressing forces and traumatic injuries to other parts of the body.

Protective footwear can be worn to stabilise the ankle joints and improve support for the leg(s) and knee(s). This improves the Workers stability and is particularly useful when work is done on unstable ground or where tasks, such as materials handling, are involved or where heavy outdoors work is performed.

Selection of safety footwear is critical as some may compromise personal safety in situations where hazardous/corrosive substances or hot materials are used which may enter or permeate the footwear or in situations where it does not provide adequate support.

Where slip and fall incidents occur at a workplace or ankle, knee, leg, and/or back overstress occurs, Managers and Coordinators are to perform a review of the type and suitability of the footwear being used. Where assessed as necessary, improved safety footwear must be provided.

#### Scale of Issue

Managers are required to approve the issue of suitable safety footwear.

Workers shall maintain and care for safety footwear provided to them for their personal protection.

#### Provision of Non-Standard or Special Footwear

Where a Worker cannot be issued with the required safety footwear that is of a suitable fit from the available selection at the Store, that person may purchase their own safety footwear in line with the minimum requirements stated in this procedure.

Upon provision of a valid receipt, verification of compliance to this procedure and completion by the program manager of a reimbursement form forwarded to Stores, Council will reimburse an amount that is the lesser of:

- The average cost of the footwear available from the Store at the time of purchase; or
- The receipted cost of the footwear.

The above process does not apply to specifically risk assessed workgroups that require specialised footwear; the cost of these shall be paid for by Council.

Where an employee cannot wear the prescribed safety footwear due to a medical condition, a medical certificate must be provided to the relevant Coordinator or Manager and suitable arrangements must be determined for the employee in relation to type of work and risk activity.

### **High Visibility Garments at Worksites**

#### Selection, Use and Maintenance of High Visibility Clothing

Coordinator /Team Leaders are to ensure that only high visibility garments meeting the requirements of this Procedure, are permitted for use at designated Council controlled workplaces.

Coordinator/Team Leaders are to ensure that other Council Workers and visitors at work sites under their responsibility adhere to the requirements of this Procedure.

High visibility garments are to be maintained at all times in a clean, serviceable condition and are to be replaced at any time they are defective or become stained or faded to any extent where their high visibility function is reduced.

Selection and use on the basis of effective visibility for the prevailing conditions and in contrast with surroundings must always be made.

### Personal Protective Equipment and Clothing Considerations

High visibility garments (AS 4602) are to be selected that are suitable to the conditions that exist at the time and location of the work site.

Work Condition	Hi-Viz Cotton Shirt	Hi-Viz Vest	Hi-Viz Winter Jacket	Hi-Viz Wet Weather Gear
Day Time Work Class D Garment	✓	✓	✓	✓
Work at Dawn, Dusk or in Poor Visibility (rain, fog etc.) Class D/N Garment		✓	✓	✓
Night Work Class N Garment		✓	✓	✓

### Exemptions

Coordinator/Team Leaders may exempt an individual from wearing high visibility clothing only on the basis of a risk assessment where their personal safety might be at risk in the use of high visibility clothing because of the nature or requirements of their specific duties at the work site.

Any such exemption should be:

- Issued in writing, such as by SWMS notation;
- Granted for a short term only and restricted to the maximum time required to undertake the immediate task that is incompatible with the use of high visibility clothing.

### **Noise and Vibration Protection**

#### Use of Personal Hearing Protectors and Vibration Absorbers

Where Workers are exposed to hazardous noise and vibration, Coordinator/Team Leaders are to provide suitable Personal Protective Equipment and Clothing, and ensure the effective use of this equipment at all times and by all persons at Council controlled workplaces, where:

- Individuals are exposed to hazardous continuous noise energy levels;
- Individuals are exposed to hazardous impact noise energy levels;
- Where repetitious exposure of the hands and arms to vibration energy occurs, or
- Whole-body exposure to shock and vibration forces transmitted through plant and vehicles.

#### Types of Personal Protective Equipment and Clothing for Noise Control

- Ear Plugs – disposable, reusable, and custom-made models. Also headband mounted and cord-attached versions are available. Noise attenuation effectiveness relies on correct fit and obtaining a good seal within the ear canals.
- Ear Muffs – which may be headband-mounted or supplied as attachment items for other Personal Protective Equipment and Clothing, including safety helmets. The effective control of noise energy by these devices varies greatly depending on materials, construction, clamping force and other factors, including fit.
- Communication Headsets, for confined space work and similar applications.
- Noise Occluding Helmets.
- Anti-Vibration Belts to prevent body organ vibration when exposed to extreme levels of airborne noise.

Personal Protective Equipment and Clothing issued for protection from noise may be used in combination to increase efficiency when exposed to extreme energy sources, including for example, earmuffs being worn over ear-plugs.

#### Types of Personal Protective Equipment and Clothing for Vibration Control

- Energy absorbing gloves and liners.
- Energy absorbing footwear and inserts.
- Energy absorbing matting.
- Energy absorbing suspension units such as air-bag or gas-filled seating systems or vehicle suspension systems.

### **Care and Maintenance Requirements**

#### Misuse of Hearing Protectors

The following practices are detrimental to hearing protectors and may affect their integrity or performance:

- Failing to maintain the items in a clean condition at all times.
- Stretching the headband of ear muffs by clamping around legs, torsos etc., thereby stretching the headband and reducing clamping efficiency.
- Failing to maintain in good condition the sound-absorbing liners or seals of ear muffs.
- Damaging the noise occluding cups of earmuffs, or exposing the cups to excessive heat and solar radiation, or applying insect repellents, paints and similar solvent-based materials or to otherwise affect the integrity of the material.
- Installing replacement components that are not of the same manufacture or type as the original.

#### Maintenance of Hearing Protectors

Earmuffs should have the sealing cushions wiped clean before and after each use to remove dirt and perspiration. Cushion replacement should be considered every 3 to 6 months. Re-issued earmuffs are to be thoroughly cleaned and inspected and have new liners and seals fitted before reissue. Earmuffs that show any damage to the cups or headband are to be withdrawn from use and destroyed.

Earplugs, including disposable types, need to be maintained in a hygienic condition and can be washed with soap or household detergent for re-use by the same person. If any doubt exists as to suitability for re-use, the items should be disposed of and new items used.

In hot conditions, disposable covers, that are commercially available, may be fitted to the seals of hearing protectors to absorb perspiration. These covers do not generally reduce the attenuation of the devices but need to be changed regularly for hygienic reasons.

### **Eye and Face Protection**

#### Use of Eye and Face Protectors

Where Workers are exposed to the risk of eye or facial injuries, Coordinator/Team Leaders are to ensure the required Personal Protective Equipment and Clothing as detailed in this Procedure is adhered to. Coordinator/Team Leaders must ensure the effective use of this equipment at ALL times and by ALL persons at Council controlled workplaces, where:

- Traumatic injury to the eye by low, medium, or high impact risk agents may occur.
- The eye(s) and/or face are exposed to radiant energy such as:
  - non-ionising radiation, such as in welding operations or
  - laser radiation
- Protection of the face and/or eyes from exposure to hazardous substances and corrosive materials such as acids and alkalis, dusts and/or particles is required.

As a minimum for all Council operations, medium impact resistance protective eyewear is to be worn. Eyewear of this classification is marked with the letter “I”. Untinted outdoor safety spectacles designated with the letter “O” provide protection simply against solar radiation (UV) but not against sun glare.

Sunglasses are NOT safety glasses unless rated to AS 1337.

#### Care and Maintenance Requirements

The following factors may be detrimental to eye protectors and could affect their integrity or performance:

- Failing to maintain the items in a clean condition;
- Any deterioration or damage to eye protectors;
- Any lens or replacement lens that exceeds its 2 year service life since issue or fitment;
- Any lens, that in any way, has been scratched, abraded, pitted, or otherwise damaged; and
- Fitment of components particularly lenses or filters, that are of a different manufacture or model to that of the original protector.

#### Maintenance of Eye and Face Protectors

All eye and face protectors are to be maintained in a clean condition at all times. Cleaning and anti-fogging compounds should be conveniently available at workplaces to encourage and assist in the maintenance of this Personal Protective Equipment and Clothing. Eye/face protectors that are re-issued to Workers or provided to visitors, are to be thoroughly cleaned and inspected between issues.

#### Prescription Glasses and Contact Lenses

The wearing of prescription glasses and contact lenses must never be considered as an alternative to required eye safety protection requirements. Eye protection should always be worn in conjunction with prescription glasses and contact lenses where required as a risk control.

‘Coveralls’ that provide wrap around protection are to be worn over prescription glasses and other controls are to be implemented according to the degree of risk and required protection.

Lismore City Council does not support the payment or reimbursement for prescription safety glasses.

#### Safety Equipment for the Control of Eye and Face Injuries

Certain safety equipment is available to minimise the risk of eye and facial injuries within workplaces. This includes screens, guards and curtains for which guidance is provided in AS/NZS 1336 and AS 3957.

#### *Screens:*

- May be fixed, moveable, mobile, or adjustable and should meet the needs of its particular application.
- Made from materials such as sheet metal, woven wire, canvas, toughened/laminated glass, and clear/opaque plastics. Reflective surfaces should not be used for screens unless treated with a light-absorbing coating where there is a radiant energy risk causing eye or skin injury.

#### *Light-Transmitting Screens and Curtains:*

- Permits an awareness to passers-by that welding operations are in progress. Curtains should be set at a minimum distance of 2 metres from the point of welding arc generation and be placed to prevent persons outside of the protected area from being exposed to reflected radiation.
- Where more than one welding operation is conducted simultaneously, screens or curtains are needed to separate these activities and to protect individual welders and other Workers involved in the concurrent activities.

#### *Exhaust Systems and Shields:*

- Partial enclosure guarding combined with exhaust systems are sometimes used to collect particles and debris generated by certain work processes, such as grinding, sawing, planing and machining.
- Some machines, such as grinders, are often fitted with movable eye shields to protect against ejected particles. These systems do not provide sufficient eye and face protection to the operator and onlookers and face and eye protection is to be worn at all times.

## **Respiratory Protection at Workplaces**

### Identifying a Need for Respiratory Protection

The recognition of hazardous situations requires detailed knowledge of the following:

- a) Work processes;
- b) The materials present, their physical form and properties;
- c) The intermediates or products formed;
- d) The control measures used to minimise the release of airborne substances into the workplace atmosphere; and
- e) The degree of exposure.

Safety Data Sheets (SDSs) that are obtained from manufacturers for all hazardous substances provide details on occupational exposure standards, which are critical in determining suitable control measures, including the need for respiratory protection.

### Types of Respiratory Protection

There are two ways of providing personal respiratory protection against atmospheric contaminants:

- a) Purifying the air that a Worker breathes. Inhaled air is drawn through a filter that removes the harmful substances. The nature of the filter depends upon the composition and physical state of the contaminating agent.
- b) Supplying the Worker respirable air. An air source independent of the working environment is provided to the Worker through an airline, air hose, or by the person carrying apparatus which provides the air.



## **Air-Purifying**

NOTE: These cannot be used in oxygen depleted atmospheres.

Air purifying devices fall into major categories as follows:

### Dust Masks

used for protection against nuisance dusts such as sawdust, chalk, plant-related and sanding dusts. These are generally not suitable for toxic substances.

### Limitations

Dust masks provide no protection against gases, vapours, or toxic contaminants. Also they supply no oxygen and therefore they cannot be used in oxygen deficient atmospheres. These must not be used for asbestos work.

### Procedure

When a dust mask is required for a job situation, the user should:

- Put on the mask and adjust it for proper fit. Some masks have adjustable face sealing areas such as over the nose and elastic type straps.
- Discard a disposable dust mask after use. If the dust mask has a replaceable dust filter, replace the dust filter with a new one when normal breathing becomes difficult or odour breakthrough occurs.

## **Air Purifying Half Mask Respirators**

Half mask respirators are the most widely used types of respirators. Several brands and sizes of these types are available on the market to assure employee comfort and a satisfactory fit. Various types of filters, chemical cartridges, and combination filter cartridges are available for employee protection.

### Limitations

Since this type of respirator does not supply air, it cannot be used in oxygen deficient atmospheres, in Immediately Dangerous to Life or Health (IDLH) atmospheres, or in confined spaces. It can only be used for protection against the contaminants and the concentration limits specified by the manufacturer. The wearer should leave an area immediately if the employee smells gas or vapour inside the mask or if the breathing resistance increases. No air purifying respirator shall be used against a contaminant which does not display adequate odour or other warning properties. The half mask respirator shall not be worn when facial hair extends under the face mask sealing area.

### Procedure

To put on and adjust the half mask respirator:

- Use the mask approved for use, following the Respirator Training.
- Hold the mask so the narrow nose cup points upward.
- Grasp both lower mask straps and hook them behind the neck allowing the chin to fit in first.
- Grasp both top straps and hook them behind the head and above the ears making sure of a proper fit on the nose.
- Adjust the straps so the fit is snug but comfortable by pulling both straps simultaneously to the rear and not outward.
- Check for leaks by using the qualitative negative / positive pressure fit check

- Each user of respiratory protective equipment must inspect, clean, and maintain the respirator after each use. Any parts showing wear must be replaced at this time with parts approved for the specific respirator.

### **Air Purifying Full Face Mask Respirators**

Full face mask respirators provide more protection than half masks because their shape allows a better mask to face seal. They also protect the eyes from irritating chemicals or particulate atmospheres. Full face masks may be equipped with the various types of air purifying filters, chemical cartridges, combination filter cartridges, and gas mask canisters, dependent upon the protection required. These respirators shall be issued to personnel for personal use and not shared.

#### Limitations

Air purifying full face masks has the same limitations for use as half mask respirators. Additionally, standard eye glasses interfere with the mask to face seal; therefore contact your Coordinator/Team Leaders for more information on obtaining a proper pair of eyeglasses which insert into the facemask.

#### Procedure

To put on a full face mask:

- Loosen all straps, pull the harness over the head, and place the chin in the chin cup.
- Pull the head harness well down on the back of the head.
- Tighten the harness gently, starting with the bottom straps and then the middle and top straps.
- Check the fit by closing off the air hose, or cartridge / canister openings, and using the qualitative negative / positive fit check.
- Each user of respiratory protective equipment must inspect, clean, and maintain the respirator after each use. Any parts showing wear must be replaced at this time with parts approved for the specific respirator.

### **Respirator Cartridges/Filters**

Respirator cartridges consist of either, a particulate filter, chemical gas and vapour removing, or a combination.

#### Gas Filters

filter fitted into a half face mask, full face mask or hood, suitable for removing low concentrates of certain gases and vapours. Filters have limited use and storage lives and are specific to certain gases or vapours. Filters are also mask specific (i.e. filters are matched to a particular make of mask).

#### Particulate Filters

These are used to remove finely divided solid or liquid particles from the inhaled air. Particulate filters have a prefix 'P' and a number indicating a class corresponding to filtration efficiency against a laboratory challenge aerosol of sodium chloride. P1, P2, and P3 filters roughly correspond to the former L, M, and H cartridges. There are 3 types of particulate filter suitable for filtering finely divided solid or liquid particles, or both, from the inhaled air.

## Fit Testing

The primary purpose of fit testing is to identify the specific make, model, style and size of respirator best suited for each required respirator user. Fit testing reinforces respirator training by having wearers review the proper methods of donning and wearing the respirator. Required respirator users should be medically evaluated and approved to wear the type of respirator selected prior to fit testing.

The fit test will not be conducted if there is any facial hair growth (stubble, beard, moustache, etc.) between the skin and the respirator sealing surface. Facial hair between the sealing surface of a tight-fitting facepiece and the face will stop the respirator from sealing properly.

Workers shall be clean shaven where the respirator facepiece comes in contact with the skin before wearing their respirator as per AS/NZS 1715 (Selection, use and maintenance of respiratory protective equipment).

### Qualitative Fit Test

A qualitative fit-test is a pass / fail means of testing that relies on the subject's sensory response to detect a challenge agent.

The quantitative fit test measures the challenge agent leakage into the respirator without dependence on a test subject's voluntary or involuntary response to the challenge agent. This system measures the particle concentration outside the respirator and inside the respirator. A ratio of these two measurements produces a fit factor ( $ff = \text{outside concentration} / \text{inside concentration}$ ).

### Fit-check

All workers required to use RPE to conduct their work duties must conduct a fit check prior to each use to ensure that the RPE provides effective protection. This can be either a positive-pressure check or a negative pressure check.

- A positive-pressure check means blocking the exhalation valve on a half or full facepiece respirator or covering the respirator surface on a filtering facepiece, usually by using your hands, and trying to breathe out. If slight pressure builds up, that means air isn't leaking around the edges of the respirator.
- A negative-pressure check involves blocking the intake valves on a half or full facepiece respirator or covering the respirator surface on a filtering facepiece, typically using your hands and trying to breathe in. If no air enters, the seal is tight.

These are classified as follows:

- CLASS (P1) Intended for use against mechanically generated particulates, (eg. silica, asbestos).
- CLASS (P2) Intended for use against both mechanically and thermally generated particulates, (eg. metal fumes).
- CLASS (P3) Intended for use against all particulates including highly toxic materials, (eg. beryllium). Class P3 requires a full face mask.

Combined gas and particulate filter combinations are used where both hazard types may exist.

Application	Hazard	Filter Rating
Sanding Drilling Grinding Cutting Sawing Sweeping	Concrete, wood, cement, stone glass, steel, plasterboard, glass, mineral fibres, paint varnish and rust particles	P1
Welding Metal cutting Metal pouring Soldering	Welding fumes and smokes	P2
Welding - MIG, TIG and other	Welding fumes and ozone	P2
Spraying pesticide, herbicide, fungicide: nuisance levels of organic vapours*	Organic vapour, mists, dust	GP1

### Supplied Air

There are three major categories of supplied air respirator:

- Air-Hose Respirators - the air supplied in this type of respirator is not pressurised, i.e. it is at or near atmospheric pressure.
- Air-Line Respirators - the air supplied to this type of respirator is pressurised, i.e. it is greater than atmospheric pressure.
- Self-Contained Breathing Apparatus - the air supplied to this type of respirator is pressurised.

Caution: Air purifying respirators used to protect against airborne contaminants such as particulate or gaseous contaminants do not necessarily provide protection against oxygen deficiency.

### Maintenance of Respirators

Respirators and their parts are to be maintained in a clean condition and any items that are re-issued for use are to be thoroughly cleaned, inspected and have filters of the required type fitted before re-use.

Any respirator that shows damage or deterioration that cannot be repaired before re-issue is to be withdrawn from use and destroyed.

Used respirator cartridges/canisters are to be disposed of under the same requirements as apply to the contaminant that they are being used against.

## **Attachment 1 – Australian Standards for Personal Protective Equipment and Clothing**

### Head Protection

- Standards Australia AS/NZS 1800 Occupational Protective Helmets - Selection, Care and Use
- Standards Australia AS/NZS 1801:1997 Occupational Protective Helmets

### Hearing Protection

- Standards Australia AS/NZS 1269.0 Occupational Noise Management – Overview
- Standards Australia AS/NZS 1269.3 Occupational Noise Management - Hearing Protector Program

### Eye Protection

- Standards Australia AS/NZS 1336 Recommended Practices for Occupational Eye Protection
- Standards Australia AS/NZS 1337 Eye Protectors for Industrial Applications
- Standards Australia AS/NZS 1338.1 Filters for Eye Protectors - Filters for Protection against Radiation Generated in Welding and Allied Operations
- Standards Australia AS/NZS 1338.2 Filters for Eye Protectors - Filters for Protection against Ultraviolet Radiation

### Respiratory Protection

- Standards Australia AS/NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices
- Standards Australia AS/NZS 1716 Respiratory Protective Devices

### Hand Protection

- Standards Australia AS/NZS 2161.1 Occupational Protective Gloves - Selection, Use and Maintenance
- Standards Australia AS/NZS 2161.2 Occupational Protective Gloves - General Requirements
- Standards Australia AS/NZS 2161.3 Occupational Protective Gloves - Protection against Mechanical Risks
- Standards Australia AS/NZS 2161.4 Occupational Protective Gloves - Protection against Thermal Risks (heat and fire)
- Standards Australia AS/NZS 2161.5 Occupational Protective Gloves - Protection against Cold Standards Australia AS 2225 Insulating Gloves for Electrical Purposes

### Leg and Foot Protection

- Standards Australia AS/NZS 2210, 1 Occupational Protective Footwear Part 1: Guide to Selection, Care and Use

### Whole of Body Protection

- Standards Australia AS/NZS 1906.4 Retro Reflective Materials and Devices for Road Traffic Control Purposes - High Visibility Materials for Safety Garments
- Standards Australia AS 2919 Industrial Clothing
- Standards Australia AS 3765.1 Clothing for Protection against Hazardous Chemicals - Protection against General or Specific Chemicals
- Standards Australia AS 3765.2 Clothing for Protection against Hazardous Chemicals – Limited Protection against Specific Chemicals
- Standards Australia AS/NZS 4399 Sun Protective Clothing
- Standards Australia AS/NZS 4602 High Visibility Safety Garments
- Welding Technology Institute of Australia (1998) Health and Safety in Welding

### Safety Signage

- Standards Australia AS 1319 Safety Signs for the Occupational Environment

## Document History and Version Control

Trim Ref	Version	Summary of Changes / Consultation	Date	By Whom
ED20/16540	1.1	Reviewed procedure	01/07/2020	WHS
	1.1	Sent to WHS Committee for consultation	27/08/2020	WHS
	1.1	With SLT for Review / Approval	22/10/2020	WHS
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