Walcha Council

Safety Management System

Document Control

Version No.	Details	Endorsement Date
Version 1	Initial Issue	2004
Version 2	Review (Legislation WH&S Act 2011,)	2012
Version 3	Adopted by Walcha Council	March 2013
Version 4	Review December 2016 – May 2017 (SafeWork)	
Version 5		

Definitions under the WH&S Act and Regulations 2011

Work Health and Safety Act 2011

object:	the main object of this Act is to provide for a balanced and nationally consistent framework to secure the health and safety of workers and workplaces.
approved code of practice:	means a code of practice (COP) approved under Part 14 of the WH&S Act 2011
authorised:	means authorised by a licence, permit, registration or other authority (however described) as required by the regulations
authorising authority:	means the Industrial Relations Commission
Category 1 offence:	reckless conduct see section 31 of the WH&S Act 2011
Category 2 &3 offence:	failure to comply with Health and Safety duty see section 32 and 33 of the WH&S Act 2011
compliance powers:	means the functions and powers conferred on an inspector under this Act
condition:	includes limitation and restriction
construct:	includes assemble, erect, reconstruct, reassemble and re-erect
corresponding regulator:	means the holder of a public office, or a public authority, of the Commonwealth, or of a State, who or which is responsible for administering a corresponding WHS law.
corresponding WHS law:	means: ***a)*** a law of an Australian jurisdiction that has the same name as this Act, and ***b)*** a law of an Australian jurisdiction that is prescribed by the regulations as a corresponding WHS law.
Court:	means the court having jurisdiction in the matter concerned.
dangerous incident:	incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety – see Part 3 Section 37 of the WH&S Act 2011
demolition:	includes deconstruction
design:	in relation to plant, a substance or a structure includes: ***a)*** design of part of the plant, substance or structure, and

	b) redesign or modify a design
disclose:	in relation to information, includes divulge or communicate to any person or publish
discriminatory conduct:	see Part 6—see section 105 in the WH&S Act 2011
document:	includes record
employee record:	in relation to an employee, has the same meaning as it has in the *Privacy Act 1988* of the Commonwealth
employer organisation:	means an organisation of employers
engage in conduct:	means doing an act or omitting to do an act
Fair Work Act:	means the *Fair Work Act 2009* of the Commonwealth.
handling:	includes transport
health:	means physical and psychological health
health and safety duty:	means a duty imposed - see section 30 of the WH&S Act 2011
health and safety Rep:	in relation to a worker, means the health and safety representative HSR elected under Part 5 for the work group of which the worker is a member
import:	means to bring into the jurisdiction from outside Australia.
Industrial Court:	means the Industrial Court of New South Wales
Inspector:	means an inspector appointed under Part 9 of the WH&S Act
internal reviewer:	means: ***a)*** the regulator, or ***b)*** a person appointed by the regulator under section 225.
local authority:	means a council or county council under the *Local Government Act 1993*
medical treatment:	means treatment by a medical practitioner registered under the *Health Practitioner Regulation National Law (NSW)*.
member of staff:	of the regulator means: (a) in the case of SafeWork NSW—a person employed in the Department of Finance, Services and Innovation, or

(b) in the case of the Secretary of the Department of Industry, Skills and Regional Development—a person employed in that Department.

Officer: means:

(a) an officer within the meaning of section 9 of the *Corporations Act 2001* of the Commonwealth other than a partner in a partnership, or
(b) an officer of the Crown within the meaning of section 247, or
(c) an officer of a public authority within the meaning of section 252, other than an elected member of a local authority acting in that capacity.

person conducting a business or undertaking—(Council) PCBU

personal information: has the same meaning as it has in the *Privacy Act 1988* of the Commonwealth.

Acronyms

Work Health and Safety	=	WH&S
Work Health and Safety Act 2011	=	the Act
Work Health and Safety Regulations	=	the Regulations
Codes of Practice	=	COP

1: Introduction

Council approach Workplace Health and Safety in a systematic manner through consultation with staff to develop a Work Health and Safety Management System (WHSMS) in an effort to:

- Prevent injury or illness from work related causes
- Minimise losses of material resources
- Minimise interruptions from accidental occurrences
- Minimise liability exposure
- Assist managers, supervisors and workers to comply with Work Health and Safety (WH&S) Legislation
- To allow Council to measure and evaluate its WHS policies and procedures, and
- To regularly review and improve the WHSMS

The WHSMS relates directly to the risk management process to ensure hazards and risks are *Identified, Assessed* and *Controlled* using the Hierarchy of Controls with monitoring to ensure controls are effective for all types of hazards/risks encountered in the workplace and public areas of Council

The policies and procedures contained in the WHSMS are supported by Safe Work Method Statements (SWMS) or Safe Operating Procedures (SOPS) as prescribed in the Code of Practice for High Risk Construction Work and will subject to the general guidance noted in AS/NZS 4801 and AS/NZS 4804. The key concepts of the WHSMS involve:

- Creation of a detailed and practical WHSMS that will be implemented into the workplace
- Allocation of appropriate resources
- Monitoring and compliance
- Auditing - to ensure effectiveness
- Meaningful consultation
- Council's WH&S policy and procedures, SWMS, SOPS
- Implementation of a WH&S performance measuring system
- Management review and improvement of the system

Council's WHSMS will be upgraded continually as changes to the Work Health and Safety Act, Regulation, Codes of Practice (COP), Standards and Council Policy and Procedures occur.

1.1 Workers Introduction to Safety

Both Council and Workers have duties in the WH&S Act 2011 (the Act), these roles are set out in- Part 2 Health and Safety Duties of the Act. Council endeavours to provide a safe working environment for all workers, and expects that all workers exercise responsibility and care in the prevention of injury and ill health to themselves and others at work.

Upon commencement of employment with Council, workers will receive appropriate safety induction, which will allow them to enter the workplace with sufficient skills and knowledge to carry out their work in a safe manner. All workers will receive ongoing WH&S training to ensure their skills and knowledge is kept up to date with current WH&S requirements.

Should a worker consider the workplace or procedures to be unsafe, they should inform their supervisor and an investigation will be undertaken with appropriate action authorised, if the matter is not resolved the issue should be reported to Council's Risk Coordinator and/or your Safety Committee representative.

1.2 Induction

Upon commencement of duty with Council, new workers shall be inducted and provided with information outlining Council's safety program together with information relating to employment conditions. The Human Resources Manager will arrange for a workplace induction on the first day of employment. This will involve receipt of safety clothing and PPE. Any worker who is transferred or takes up a new position within the organisation is to be suitably inducted into the new position.

1.3 Walcha Work Health and Safety

1.3.1 Council's Commitment

The health and safety of all persons employed by Council or visiting a Council workplace is considered to be of the utmost importance. Resources will be made available by Council to comply with all relevant Acts, Regulations and Standards to ensure that the workplace is safe and without risks to health.

1.3.2 Work Health and Safety Management System WHSMS

In order to implement the general provisions of this WHSMS, a System of activities and procedures will be formulated, effectively implemented, monitored and reviewed. Council's safety system will meet the requirements of AS:4804.

1.4 Responsibilities

1.4.1 General Manager

- Defined as the Person Conducting the Business or Undertaking (PCBU) under the Act
- Show commitment to, and leadership in all areas of WH&S
- Ensure the effective implementation of WHSMS across the entire Council
- Request the necessary resources from Council
- Support Managers and hold them accountable for their specific responsibilities

1.4.2 Managers

- Defined as a worker under the Act
- Show commitment to, and leadership in all matters of WH&S affecting his or her area of control
- Develop, promote and review the WHSMS
- Ensure the effective implementation of the WHSMS within his or her area of control
- Support supervisors and hold them accountable for their specific responsibilities

1.4.3 Supervisors

- Defined as a worker under the Act
- Show commitment to, and leadership in all matters of work health and safety affecting his or her area of control
- Ensure that the Work Health and Safety Management System is complied with and workers are supervised and trained to meet their requirements under this System
- Consult workers on issues that affect their health and safety and any concerns they may have are referred to management

1.4.4 Workers

- Defined as a worker under the Act
- Show commitment to all matters of work health and safety affecting themselves, their fellow workers and – others at their workplace
- Comply with the Work Health and Safety Policy and Management System

1.4.5 Work Health and Safety Committee

- Complying with Consultation under the Act
- Existing WH&S Committee
- Elected Members and employer members
- Authority to make decisions on matters discussed
- Consensus on all aspects of the WHSMS through consultation

2: Work Rehabilitation – Return to Work

2.1 Policy

Council is committed to preventing injury and illness through providing a safe work environment and providing for the welfare of all our employees. However, in the event of an injury at work Council is committed to ensuring where possible our workers Return to Work (RTW) to enable them to Recover at Work (RAW). Council has Policy and Procedures to ensure workplace rehabilitation. This policy will be reviewed from time to time in consultation with workers.

Appendix No 1: Return to Work – Recover at Work Policy – WINT/17/35
Appendix No 2: Return to Work Plan – Template – WINT/15/2114

2.2 Provision of Suitable Duties

Where the worker is unable to return to their previous duties, either temporarily or permanently, the provision of suitable duties may assist in the recovery process. Council has set up a range of selected duties which will be made available to the worker and their treating doctor.

2.3 Return to Work Process

The major stages and essential features of the rehabilitation process are:

2.3.1 Report of Injury/Illness

The staff member reports symptoms of work-related injury or illness to their immediate supervisor and completes an accident / incident report form immediately following the incident.

The supervisor completes the relevant section of the report and it is then forwarded to the Return to Work Coordinator within 48 hours.

The worker's condition is assessed and diagnosed, by the injured worker's Doctor. Council always reserves the right to also obtain a report from a second Doctor who can then liaise with the injured worker's Doctor on Council's behalf.

The staff member and supervisor / manager are advised about entitlements, rights and responsibilities, forms of assistance available and procedures to be followed by the Return to Work Coordinator.

2.3.2 Action Taken in the Workplace

Where determined the workplace is inspected and work practices are examined. Any necessary modifications to the work site or work practices will be recommended.

2.3.3 Return to Work

The staff member either remains at work or returns to work as early as possible. Close liaison between treating health professionals, the Return to Work Co-ordinator, the Supervisor / Manager and the member of staff undergoing the return to work program is maintained.

The staff member continues to be employed in or against their position for not less than twenty-six weeks from report of injury or illness.

Appendix No 3: Recover at Work Program – WINT/17/33

2.3.4 Review of Progress

The staff member's progress is reviewed at regular intervals. If a successful return to work has not been completed within twenty-six weeks, a review takes place which includes:

- Assessment by treating health professionals
- Reports by Return to Work Co-ordinator and where required Work Health and Safety personnel / Manager
- Review by relevant Director/Supervisor
- Consultation with staff member

Following this review, recommendations are made regarding the staff member's future employment and rehabilitation needs. The staff member will be kept informed throughout the process.

2.3.5 After Twenty Six Weeks

If satisfactory progress is being maintained, the staff member may continue to be employed in their previous position while rehabilitation continues.

If a return to original duties is considered unlikely or inadvisable, the relevant Director may request that the position be vacated while the staff member continues rehabilitation either in the same or in another area.

2.3.6 Long Term Rehabilitation

If continued rehabilitation is required and staff member's progress is satisfactory, further extensions of the work based rehabilitation program may be approved. Council will try to assist staff with long term disabilities to find suitable alternative positions, but can give no undertaking to provide selected duties on an unlimited basis.

If after six months the staff member is unable to perform productive work of any kind which is normally available within Council then retirement on medical grounds or termination of employment may be considered.

Note: If a staff member is unable to perform their previous duties and another person is employed to do those duties, the other person will be employed only on those duties in a temporary capacity, pending the outcome of the rehabilitation process.

3: WH&S Consultation

Council shall consult with workers as prescribed in the Act who are directly affected by health and safety decisions in accordance with Part 2, Division 2 of the Act.

Council understand that workers generally have the best knowledge about workplace hazards and their input is crucial to the success of Council's WHSMS. Continuous consultation throughout the working day will ensure WH&S information is shared by all.

Council shall consult by way of a Work Health and Safety Committee established in accordance with the Code of Practice: Work Health and Safety Consultation, Co-operation and Coordination 2011. Direct consultation shall also take place with all affected workers when developing or reviewing policies, procedures and safe work method statements as well as any other matter recommended by the Work Health and Safety Committee.

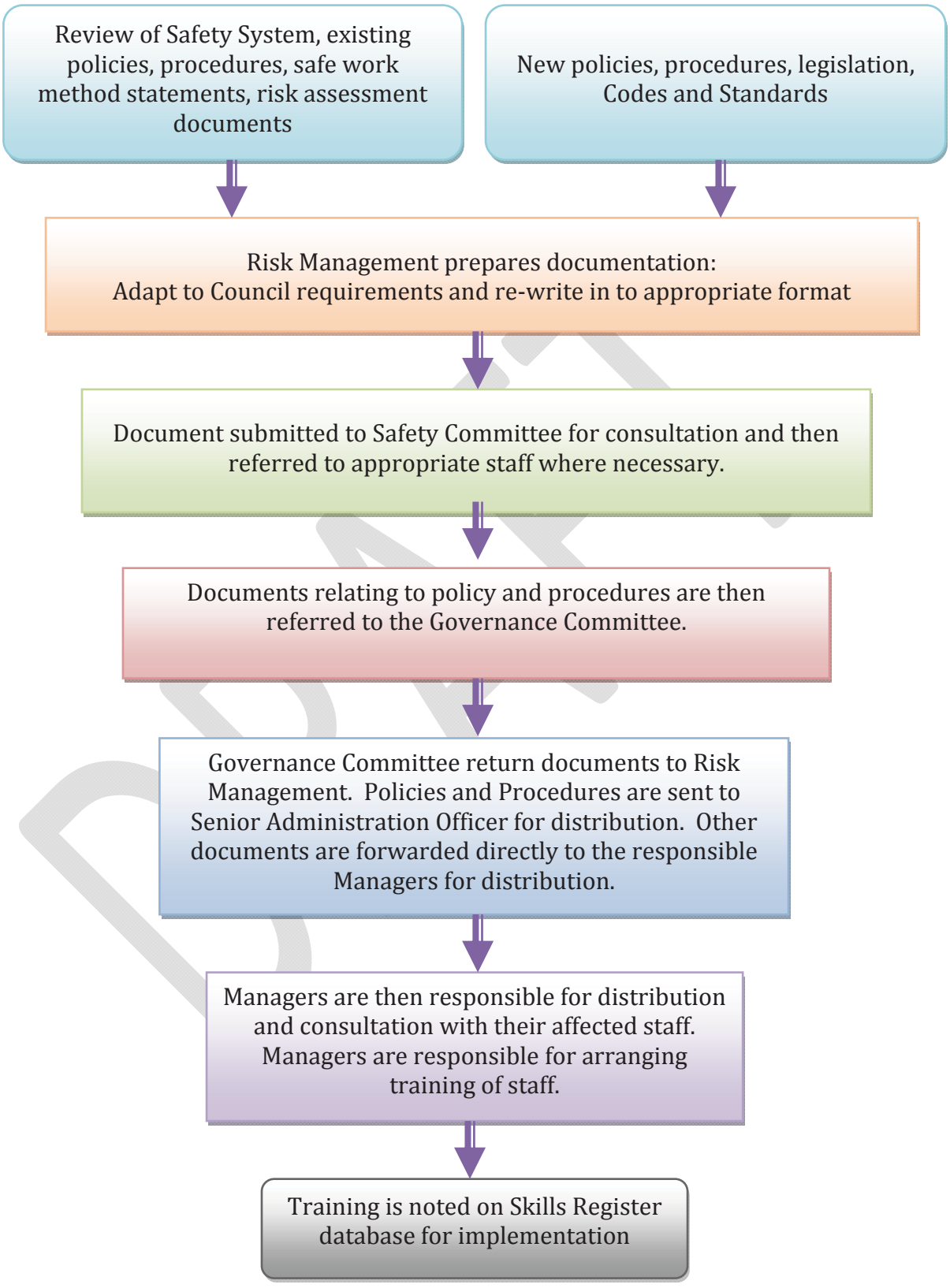
When a WH&S issue is identified or changes are implemented which require consultation workers will be notified via pay slips, notice boards and/or their safety committee member.

Council shall review its consultation arrangements:

- Every two years
- If requested by the Work Health and Safety Committee
- If requested by the majority of workers in a workgroup
- If there has been a significant change in the composition of the work group that is not reflected in the existing arrangements

Workers may request their industrial organisation to represent them for the purpose of consultation on the Work health and safety consultative arrangements.

3.1 WHS Consultation Process



4: Documentation

Documentation provides evidence of compliance, not only with the Safety Management System, but also with Legislation, Standards and . No changes can be made to the documentation without the endorsement of the Walcha Risk Management group.

Any documentation that effects the working arrangements of workers, contractors or any other person who may be involved in the day to day activities in the workplace, for which Council is responsible, may be put before the safety committee for consideration and endorsement.

5: Record Keeping

Documentation is a key part of the WHSMs, the range and detail of procedures and information will be dependent upon the complexity and importance of the work, the methods used, and the skills and training needed by personnel involved in carrying out the activity.

Council, including contractors must have in place procedures for the identification, filing, retrieval and retention of Work Health and Safety records. These records not only provide evidence of compliance with the Safety Management System, they also provide evidence of compliance with Legislation, Standards and COP. These records will include (but not be limited to):

- Risk assessment documentation
- Audit reports
- Site induction
- Accident/Incident documentation
- Details of any hazardous substances held, their quantities and locations
- Inspection and test reports
- Safety equipment records
- Asbestos reports
- Confined spaces
- Dangerous goods
- Chemical register

The Site Supervisor will ensure that all documentation is completed and legible within the required time.

All completed and finalised documents are to be forwarded the Safety Officer.

6: Risk Assessment

6.1 Introduction

The purpose of risk management is not to eliminate all risks but rather to reduce them to a level acceptable to Council in accordance with its risk appetite. Council will manage risk with a mature proactive approach while achieving a balance between the costs of managing risks and the anticipated benefits.

6.2 Definitions

Hazards are anything that has the potential to harm the health and safety of a person.
RISK Risk is the likelihood of the hazard causing harm and the consequences of severity if it does so

Hazard Identification and elimination is not only the responsibility of management in providing a safe workplace, but also requires worker involvement and commitment. As such, hazard identification, assessment and control shall be an ongoing process for all. It is the responsibility of everyone (management, supervisors and all workers) to identify, assess and control where possible, all hazards. Council has adopted a Risk Management Plan

Refer - Risk Management Plan – WO/15/1285

7: Worker Facilities and Waste Disposal Arrangements

The Site Supervisor or Project Manager shall where practicable ensure that worker facilities for the project site comply with the Managing the Work Environment and Facilities COP and are adequate for the number of personnel using them at each stage of the project. The Site Supervisor shall arrange for waste and refuse to be stored in suitable containers at the site and to be disposed of regularly, in order to maintain the site in a clean and tidy condition.

8: First Aid

The Site Supervisor will arrange for a first aid kit to be placed in a prominent accessible position on the site and inform staff of its location. The Site Supervisor or the worker administering first aid shall arrange for the first aid kit to be restocked. All vehicles and plant items contain a first aid kit. Sites contain a first aid kit appropriate for the situation ie pre school, pool.

A worker who holds First Aid qualifications may be called upon to administer first aid and they shall:

a) Carry out any first aid treatments that are required
b) Record details of all first aid treatments

Where no First Aid Officer is available, the Site Supervisor will determined the initial treatment for the injured worker and respond accordingly e.g., call ambulance; transport to First Aid Officer or outpatients at local hospital.

9: Incident/Accident Reporting and Investigation

An accident or incident is defined as – any event which causes or has the potential to cause injury or illness to any worker or member of the public or damage to any property. It is important to collect sufficient information to identify and prevent workplace accidents to:

- Identify all of the factors which may have contributed to the accident or incident
- Identify other potential causes of the accident or incident
- Identify actions that will reduce or eliminate the risk of the accident, incident or related events recurring
- Ensure that the necessary actions are implemented

- Identify details for an insurance claim
- Identify remedial action

Refer - Incident Reporting and Investigation Procedure – WINT/17/43

10: Plant Operation

An appropriate SafeWork Certificate or Certificate of Competency is required to operate plant or equipment. **NO worker is to operate plant or equipment without the appropriate competency qualification (in-house) or relevant SafeWork ticket.**

Plant operators shall carry out a start-up check before using plant each day, and record the information on the Plant Pre-Start up Checklist Form. Documents will be retained for audit purposes. If the operator considers the plant or equipment is unsafe and requiring inspection, the operator is to contact the Works Supervisor – Plant immediately.

NOTE:

1. If the plant or equipment item is considered to be unsafe, the plant or equipment item is not to be used'.
2. No plant or equipment is to be started or operated without the operator being in full control, i.e. Firm grip of hand held equipment or seated in the operators seat.+
3. Council are developing and delivering training packages.

11: Permits, Certification and Licencing

Workers, who are required to hold certification, permit or licence for work purposes must ensure that the certificate, permit or licence is kept in force. Any endorsement to the certificate, permit or licence must be reported immediately to the Human Resources Manager. All licences, plant tickets and/or permits will be inspected annually at performance appraisals.

Work that requires certification e.g. Confined Spaces, First Aid, will be flagged via the Skills Register three months prior to the expiry date.

12: Protective Clothing and Equipment

Managers are to ensure that Council supplied and approved PPE is worn and utilised by all workers, visitors, and contractors whilst working in a Council controlled workplace. Council shall provide all PPE to workers to ensure their health and safety at work.

By agreement with the relevant Union it is a condition of employment that workers must correctly wear PPE issued by the Council under Chapter 3, Part 3.2, Division 5 of the Act. PPE selected for use shall carry the approval of Australian Standards where applicable.

12.1 Responsibilities

12.1.1 Managers are to:

- Ensure that PPE provided including safety clothing complies with Australian Standards and Industry Standards is readily available and properly maintained
- Ensure that the training in the use, fitting, maintenance and storage of personal protective equipment is provided to all workers
- Provide PPE to reduce a particular risk or in combination with other risk controls
- Replace PPE at appropriate intervals

12.1.2 Team Leaders/Site Supervisors are to:

- Ensure that workers under their direction have all necessary PPE available
- Ensure PPE is cleaned and properly maintained.
- Ensure that equipment is used in a proper way at all times.
- Ensure compliance with the PPE procedures.

12.1.3 Workers are to:

- Use all protective equipment provided in the manner intended
- Wear safety clothing in the manner intended
- Avoid damaging PPE and safety clothing
- Immediately report lost or damaged safety equipment or safety clothing
- Keep PPE clean and maintained at all times
- Not alter any PPE provided by Council

12.1.4 Contractors/Visitors Obligations

Contractors and/or on-site suppliers and the like, directly or indirectly engaged by Council are required to meet the minimum protective safety clothing/equipment and PPE requirements at their own costs. There will be no exemptions to this requirement and it will be the responsibility of the contractor's site supervisor to ensure that all requirements are met. Basic mandatory items would include:

- Safety boots
- Sun hat (brim not less than 8cm)
- Long sleeve shirts with collars
- Long trousers
- Safety vests (where appropriate)

Other safety equipment and clothing may be required at specific work sites and will be determined by the site supervisor.

Contractors/visitors who do not comply with the necessary requirements will be denied entry to worksites. Should the contractor/visitor not have adequate safety clothing or equipment, the site supervisor should contact the store to obtain the required article/s. If the article is unavailable for return to the store due to soiling or wear and tear the contractor/visitor will be responsible for the cost of the PPE.

Details of Council's WH&S Policy and other policies will be made available to contractors, suppliers and the like upon request.

12.1.5 Obligations of Other Personnel

Non-workers of Council such as Community Service workers, labour market program workers, work experience personnel, work for the dole personnel, have the same obligations as regular workers of Council.

Exemptions to this requirement will generally only affect "sun protection" areas and will only apply to short term occurrences (working no more than 10 minutes in direct sunlight).

Details of Council's Work Health and Safety Policy and other Workplace Policies will be made available to relevant personnel or organisations upon request.

12.2 Worker Consultation

When purchasing new or replacement protective clothing, safety equipment or PPE, Council will consult with workers and/or their representative and with their Work Health and Safety Committee.

12.3 Non-compliance by Workers

If any worker cannot for medical or physical reasons, wear protective clothing or use protective equipment as supplied, then the worker must give Council an explanatory written statement signed by a Medical Practitioner. Council reserves the right to have the worker examined by a Medical Practitioner of Council's choice.

Council also reserves the right to re-deploy the worker or take other action if necessary should the worker be unable to wear appropriate safety clothing and/or PPE.

12.4 Disciplinary Action

Workers are to be aware that to interfere with, alter or misuse PPE as supplied shall be considered a serious breach of Council's WHS requirements. Disciplinary action as stated in the relevant award and Council's Disciplinary Policy will be enforced. Supervisors will also be found to be in breach of their WHS responsibilities if they do not enforce the requirements of this policy.

12.5 Training

All new workers, as part of their induction program, will be made aware of their responsibilities regarding compliance of the WHS Act and Council's policies relating to the wearing of safety clothing and correct use of PPE. Workers will receive training and education regarding the use of safety equipment and PPE.

12.6 Issue PPE

12.6.1 Outdoor (Works) Staff – Permanent

The following clothing, footwear and protective equipment will be provided to all permanent staff as soon as practicable after commencement of employment. A kit bag will be provided to workers for storage of items.

12.7 Safety Kit

- 1 Hard hat with brim (not less than 8 cm)
- 1 Safety glasses
- 1 Sun glasses
- 1 Ear muffs
- 5 packets ear plugs
- 1 Wet weather gear/pants
- 1 Sun screen 30+
- 1 Lip balm
- 1 Leather gloves
- 1 Disposable dust mask
- Disposable overalls
- 1 broad brim sun hat
- Winter cap
- Night PPE (White overalls with reflective tape)

12.7.1 Outdoor (Works) Staff – Temporary – 6 months or less

The storeman will supply the temporary worker with adequate protective safety clothing/equipment and PPE so as to ensure the workers health, welfare and safety whilst on the job e.g. safety clothing, sun hat, safety boots and safety vest. Items that are site or plant specific (goggles, face shields) will be supplied on request by the supervisor.

12.7.2 Outdoor (Administrative) Staff

Includes persons such as the Works Supervisors, Supervisors and Storemen. These persons are to have access to such outdoor issues, including kit bag, as is necessary (footwear, wet weather clothing, and sunscreen.)

12.7.3 Indoor (Administrative) Staff

Minimal protective safety clothing/equipment and PPE is required. Persons employed in Engineering and Environmental Services to have access to such items of 'Outdoor (Works) Staff' issue as necessary (footwear, wet weather gear, hard hat, sun hat, safety vests, long trousers and long sleeved shirts) to carry out their duties in a dual work environment. Reasonable footwear is to be worn by all office staff.

12.7.4 Indoor (Temporary) Staff

There are no specific provisions made for temporary indoor staff other than reasonable foot wear is to be worn at all time. Temporary indoor staff will be issued with a safety vest and broad brim hat. All other PPE will be supplied on a needs basis.

12.7.5 Pool Staff

Pool staff must wear enclosed footwear at all times. Steel capped safety boot/shoes must be worn when operating lawn maintenance equipment, working in filtration plant rooms or in an area where there is a risk of dropping or falling of heavy or sharp objects. Staff may wear running type shoes (non-safety) during normal life guard activities. Thongs or sandals are not permitted. Pool staff must comply with all other aspects of this policy and wear the uniform provided.

12.7.6 Individual Safety Items

Council will provide individual safety items in accordance with Council Polices and with the below recommendations to be taken into consideration.

12.8 Safety Clothing

- One (1) pair of overalls and One (1) pair of night overalls if required
- Four (4) Trousers, overalls and/or (Council clothing policy) must have a UVPF of not less than 50 UPF+, be close woven and allow for air circulation and comfort.
- Three (3) Shirts must have a UVPF of not less than 50 UVPF+. Shirts must be close woven and of correct fit to allow for air circulation and comfort. Sleeves are to be worn fully extended unless arms are in water/mud then they may be rolled up for the duration of that work.

12.8.1 Sunscreen

- At least 30+ UVA/UVB sunscreen as per the NSW Cancer Council guidelines must be worn on unprotected skin at all times
- Lip balm 30+UVA/UVB must be worn at all times

12.8.2 Footwear

- Safety (steel cap) leather work boots - choice of style, i.e. lace-up or elastic side
- Rubber boots with steel caps (as required)

12.8.3 Eyewear

- Sun glasses must comply with AS: 1067
- Safety glasses, safety goggles must be of an approved type and must be used in specific circumstances

12.8.4 Hats

- A broad brimmed hat or legionnaire style cap will be worn at all times as recommended by the NSW Cancer Council
- Hats will be close weave and will have a brim of not less that eight (8) cm. Legionnaire caps will be similarly manufactured of a close weave and will have a front peak of seven (7) cm widths
- One broad rimmed sun hat (brim not less than 8cm)
- Legionnaires Cap
- Hard hat and sun brim/legionnaires flap (as required)

Note: Broad brimmed hats or legionnaires caps are to be worn whenever the worker is exposed to UVR.

12.8.5 Safety Vests

- High visibility clothing/vests must be worn at all times when working near working plant, adjacent to moving traffic, traffic control or other workplace areas where the worker/contractor or visitor so as to make the person more conspicuous and to warn road users of their presence
- Safety clothing/vests shall be properly fastened when being worn at work sites so that the entire available area of high visibility material for each direction of observation can be seen

12.8.6 Wet Weather Clothing

- One Raincoat, trousers and hat

Note: The use of equipment such as a concrete saw, grinders, welders, and chainsaws will require specific protective safety equipment. Workers must arrange for the supply of such safety clothing and/or PPE with their supervisor.

12.8.7 Safety Helmets

Safety Helmets (hard hats) are provided for workers carrying out work under the following conditions:

1. In any area designated by signposting as a "Safety Helmet Area"
2. Whilst in a trench or shaft exceeding 1.5 metres in depth or any trench where heavy plant, (backhoe, front end loader and the like) is working within 10 meters of where you are working
3. Whilst working within 10 metres of an operating backhoe, loader, crane or excavators bucket
4. Working in places over which it is impractical to fix overhead protection and there is a risk of items falling which would cause injury
5. Whilst working in areas specified as a confined space in accordance with Chapter 4 Part 4.3 of the WHS Regulation 2011, AS 2865, -Safe Working in a Confined Space and the Confined Spaces COP
6. Whilst unloading/loading beneath or within 10 metres of waste or general material
7. In any area designated as a mine or quarry
8. Whilst carrying out or assisting in all tree lopping operations

Note: A risk assessment re the wearing of safety helmets is to be carried out on all activities not covered in items 1-8

12.8.8 Replacement of Safety Helmets

Replacement for the safety helmet harness will be made at a period of two (2) years, while the shell of the helmet must be replaced every three (3) years from the date of original issue. Investigation into implementing a common expiry date is to be conducted and if this is feasible complete helmets will be replaced on a two year cycle.

Replacement issue will be made in cases where the helmet has been subject to a serious impact. Unserviceable helmets are to be destroyed. Under no circumstances are safety helmets to be subjected to paint, soluble, marking pens or stickers as these can have a detrimental effect on the material from which the helmet is made or hide flaws and render them useless as efficient head protection.

12.8.9 Replacement Issues

1. For safety clothing items it is expected that re-issues shall occur on an exchange basis. In the event of excessive wear and tear, spillages, the supervisor shall assess the need for replacement. The storeman will be given the item so as to determine if there is a quality control issue or if indeed there is reasonable wear and tear or the item has been damaged so as to leave the item unserviceable. The storeman will be responsible for approval for replacement
2. All other items of clothing and/or PPE shall be on assessment of the supervisor or by legislative requirements (e.g. hard hats, visibility of safety vests)
3. It is the responsibility of the worker to ensure that the safety items contained in their safety kit are maintained at all times of quantity and condition
4. Issuing of replacement clothing and/or equipment will only be done upon the return of the old or defective clothing/equipment
5. Lost or stolen items, or items that cannot be returned for any reason whatsoever, require the approval of the supervisor before re-issue. A written explanation is required from the worker for any stolen or lost safety items
6. The issue and return of clothing/equipment will be recorded in Council's Safety Clothing/ PPE Register

12.8.10 Additional, Alternate or Subsidised Issues

Requests for additional clothing or alternate non-standard clothing are to be submitted in writing to the Director/Manager. Prior to the Director of Engineering deciding to allow for non-standard safety clothing or PPE he/she should discuss the matter with the Risk Manager and/or the WHS committee.

A Medical Certificate, where necessary, must accompany requests for non-standard safety clothing or PPE. Workers may purchase additional safety clothing/PPE at their cost.

12.8.11 Special Clothing or PPE

Special protective clothing, e.g. for severe weather conditions will be made available on a permanent or casual basis determined by the supervisor. Workers who require special safety glasses to fit over prescription glasses should advise their supervisor who will make arrangements through the store for the appropriate item.

12.8.12 Compliance

No worker shall commence work unless they are suitably attired in Council supplied or approved equipment in accordance with the requirements of this policy. All workers are to wear the appropriate issued protective safety clothing/equipment and PPE and are responsible in the first instance for compliance **at all times whilst on duty.** Supervisory staff must ensure that compliance of this policy is being adhered to at all times. PPE is to be worn only by the person to whom it has been issued.

12.8.13 Care and Maintenance of Safety Clothing and PPE

Workers issued with protective safety clothing/equipment and PPE will be responsible for the daily care and cleaning of each item provided. Workers will be responsible for the safe keeping of all safety clothing and PPE issued to them and should report any defects in the clothing/equipment as soon as practicable to their supervisor who will arrange for the replacement of the article if deemed so.

12.8.14 Return of Safety Clothing and PPE

Permanent and temporary workers upon termination are required to return all clothing that has Council's motif embroidered on it. Used items will be assessed for reuse by the storeman depending on the condition of the item.

12.8.15 Other

While recognising that there are other items of PPE, for example dust masks, such items will be identified in individual SWMS and/or SOPS.

13: Purchasing

Council has legal obligations to ensure that plant/equipment or substances provided for work are safe and without risks to health and safety when properly used. Purchases of plant/equipment and/or substances used by Council workers or contractors will, in consultation with workers, be subject to hazard identification and risk assessment.

In considering the purchase of plant/equipment or substances, the following questions should be addressed:

1. Why is the organisation purchasing the item?
2. What safety information will be obtained regarding the item (Australian Standards, SDS, and Equipment Manual)?
3. Which workers and/or work processes will be affected by the purchase?
4. Have the affected workers been consulted? - if so, when?
5. What are the WH&S risks associated with the purchase compared with previous plant/equipment or substances?
6. How will the purchase help manage identified WH&S issues?
7. What will be done to ensure the use, storage and transport of the purchase is safe?
8. What changes will need to be made to the SWMS?
9. What training will be required, who will supply the training and who will be required to be trained?

A purchasing risk assessment is essential to address problems that may arise following the purchase of plant, equipment and substances. It is far more cost effective to carry out assessments of plant, equipment and substances and their use in the workplace ***before*** a purchase is made rather than ***after***. This will ensure the most suitable equipment is purchased at the onset.

14: Safe Work Method Statements (SWMS)

(SWMS) are required for the eighteen high risk construction work activities defined in the WHS Regulations, and Construction Work COP. A SWMS is a written document that sets out the high risk construction work activities to be carried out at a workplace, the hazards and risks arising from these activities and the measures to be put in place to control the risks.

Its primary purpose is to help supervisors and workers implement and monitor the control measures established at the workplace to ensure high risk construction work is carried out safely.

For all other construction activities a SWMS is not required. However, Council must manage risks to health and safety by eliminating or minimising risks so far as is reasonably practicable. SWMS have been prepared with the consultation of workers who are involved in the work process.

Council's SWMS have been modelled of the COP – Construction Work and Regulation 299(2) of the WHS Regulations. A safe work method statement must:

- identify the work that is high risk construction work, and
- specify hazards relating to the high risk construction work and risks to health and safety associated with those hazards, and
- describe the measures to be implemented to control the risks, and
- describe how the control measures are to be implemented, monitored and reviewed

Should a SWMS require alteration, the original document is to be returned to the HR Manager together with the amendment. A new document will be produced and forwarded back to the relevant workplace. A blank SWMS has been attached.

15: Safety Audits

Safety audits enable work hazards including WHSMS failures to be identified and evaluated. A comprehensive audit may take several hours or even days, depending on the workplace and its systems.

Council's Work Health and Safety Audits record the current WH&S status of all Council assets and systems. It also assesses progress with implementation of WH&S management strategies.

A systematic examination, carried out by a competent person in consultation with workers or their representatives, is used to determine whether activities conform to planned arrangements, whether these arrangements are implemented effectively, and whether they are suitable to achieve the Council's WH&S policy and objectives. The audit also identifies if Council is meeting current SafeWork WH&S requirements. The results of the safety audits are documented and Managers and workers consulted. Preventative/corrective action plans are subsequently developed.

The Safety Audit includes a review of the WH&S policies and procedures and assessment of the implementation of those policies and procedures.

15.1 Planning Audits

Periodic audits are scheduled at regular intervals and may include auditing of specific hazards e.g. buildings and grounds, construction sites, hazardous substances, tools, ergonomics and documented procedures. Intermediate audits are made at irregular intervals and are usually unannounced e.g. emergency procedures, confined space entry compliance, traffic control compliance.

15.1.1 Corrective and Preventative Action

The findings, conclusions and recommendations reached as a result of the audit will be documented together with the necessary corrective and preventative actions.

Corrective action will be taken within a given time frame after the event to correct any problems and to ensure that a repetition does not occur.

Preventative action is pro-active and involves taking steps before a problem occurs.

Management will ensure that the corrective and preventative actions will be implemented and that there is a systematic follow-up to ensure their effectiveness.

16: Safety Compliance Inspections

WH&S compliance will be measured by way of WH&S compliance inspections. Inspections will be carried out by a competent person. The objective of the inspections is to ascertain WH&S compliance over a wide range of activities.

The frequency of compliance inspections will be determined upon the nature of the work. Areas that involve high risk activities will require more frequent WH&S compliance inspections.

Where a workplace inspection reveals breaches of the WHSMS the officer responsible for the inspection may, should he/she feel it necessary, complete a workplace compliance advice form and leave it with the site supervisor for work rectification.

17: Safety Committee

The Safety committee is an important forum for consultation on WH&S issues within Council. The committee meets regularly to discuss WH&S issues that have been raised. Committee members are made up of both worker and management representatives. The committee is appointed under the requirements of the Act. The purpose of the Committee is:

- To provide a forum that will allow consultation and discussion between management and employees at the Council to aid in achieving a safe workplace
- To advise the Council on effective ways to ensure the health and safety of staff, visitors and contractors
- To encourage all staff and contractors to work together to establish a safe and healthy working environment, and
- To enable all persons employed by the Council and persons covered by the legislation to be able to refer matters to the Committee for advice and assistance.

The Committee shall concern itself with all WHS matters including:

- The review of information related to WHS performance including accidents, hazards and injury and illness data so as to assist the Council in reviewing, producing, updating and monitoring WHS policies and programs
- Obtaining from the Council, prior to implementation, all details of proposed changes to the place of work which could affect the WHS of persons at the Council
- The review of WHS risk management activities occurring within Council including scheduled workplace inspections
- Recommendations for training and education for particular groups in order to address WHS issues
- Make recommendations for corrective actions
- Conducting health and safety audits, including workplace inspections

18: General Induction for Construction Work

New workers &/or transferred workers will receive a WH&S induction. The induction consists of administrative and on the job induction. No worker is to commence work unless receiving WH&S induction.

18.1 General WH&S Induction Training

All workers entering a Construction area require general WH&S induction training course to familiarise participants with basic principles of health and safety in the construction industry in NSW in order to assist in the prevention of injury and illness at work. Any person re-entering the industry after an absence of two consecutive years or more will require re-training in general WH&S induction in accordance with the COP Construction Work.

General safety induction for workers and/or subcontractors commencing work on the site should cover the following topics:

- WH&S responsibilities at the workplace
- Outline of responsibilities of supervisors
- Consultation at the workplace
- Health and safety information at the workplace
- Identifying safety signs
- The function of safe operating procedures
- Principles of risk management
- Reporting mechanisms for unsafe conditions and accidents/incidents
- Role and function of health and safety committees
- Emergencies and first aid requirements
- Workers compensation and injury management
- Overview of common industry hazards
- Personal protective equipment

18.2 Work activity WH&S Induction Training

Work activity WH&S induction training is to provide participants with knowledge of the health and safety issues that are relevant to the construction work activities undertaken by Council. This training is based on hazard identification, risk assessment and control measures. Any person re-entering the industry after an absence of two consecutive years or more will require re-training in work activity WH&S induction.
The COP Construction Work states that training must be delivered in Australia y a Registered Training Organisation (RTO) and that the training should include.

- The roles, responsibilities and rights of duty holders
- Health and safety consultation and reporting processes
- The principles of risk management
- Common Construction hazards and control measures
- Safety information and documentation – eg WHS management plans and SWMS

Additional training will be provided for persons performing management and supervisory functions. Work Activity training can be carried out in conjunction with general Construction Induction Training.

18.3 Site Specific WH&S Induction Training

Site specific WH&S induction training is to provide participants with knowledge of the WH&S procedures and risks and hazards specific to a particular workplace or site. Site specific WH&S induction training must be provided to all persons carrying out any construction work and must be provided for every site.

Site specific WH&S induction training must include:

- Any site specific hazards and risk control measures involved in carrying out the work as identified by the risk assessment process
- Regulatory requirements or COP relevant to any site specific hazards
- Site orientation including location of safe access, amenities, first aid
- Site specific safety rules
- Accident, emergency and evacuation procedures and associated equipment on site

A Site Induction form is to be completed for all new workers and visitors that will carry out construction work.

19: Contractors

The use of contract work has increased over recent years as organisations concentrate on their core operations in an effort to enhance performance. Although the advantages of using contractors are many and varied, all contracting comes with significant potential WH&S problems. Council may contract work out but it can never contract out its responsibility for the safety of its workers, its contractors and the public. Under the ACT contractors are classified as workers.

Contracting work out does not diminish the overall responsibility of Council for WH&S.

Council having the management or control of a workplace has a duty to see that the workplace and means of access and egress are safe and without risks to health and safety. This duty is owed to anyone entering the workplace. Council may be considered to have management or control of the workplace even though a contractor has the practical day to day control of it.

The Act requires Council to ensure that its workers and contractors carry out their work in safe premises, using proper and safe plant and substances, employing safe systems of work and in which there has been adequate instruction, training and supervision.

19.1 Contract Specifications

All contracts will have attached to them specifications for the management and controls for WH&S. These contract specifications will specify what health and safety requirements will be expected of contractors who are tendering for work. This includes contracts for major construction work, smaller construction work and for the provision of other services (sub-contracting).

When setting up subcontracts, the Works Manager shall notify subcontractors in writing of any specific site safety requirements which subcontractors have to address. When a subcontractor is establishing the site, the Works Manager, Site Supervisor or Project Manager shall check before the subcontractor starts work that the subcontractor has appropriate certificates and permits, has carried out any risk assessment needed for the

subcontracted activities and has established safe work procedures if needed. The Works Manager shall arrange site safety inductions where appropriate.

Subcontractors must follow their own Safety Management System while performing their work. Contracts must include insurance details and all safety precautions that have been identified for the job. Contractors must sign and return to Council the Subcontractors Statement before commencing work.

20: Safety Review Performance Measures

To accurately record workplace safety performance and effectiveness of the implementation of any workplace WH&S management system, the use of process indications (what gets done) is required. A safety meter is a positive performance measurement tool developed to appraise both WH&S system implementation and the behaviour of workers working within such a system. It records both compliance and non-compliance to selected categories of measurement.

Categories for measurement are developed for each workplace. A criterion is then established against which each category can be measured. The criteria reflect a mix of legislative requirements as well as standard industry safety practices and can be scored either *complaint* or *non-compliant*. A workplace inspection takes place in a logical sequence. Each work area is appraised against the categories/criteria and recorded on a score sheet. A list of *non-compliant items* is developed for action based on the level of risk, and a safety score is calculated which is plotted over time to gain an accurate picture of safety performance. Feedback is then provided to the workplace to help raise awareness.

21: Review and Improvement

The Safety Officer will, at appropriate intervals, conduct a review of the WHSMS to ensure its continuing suitability and effectiveness in meeting Council's WH&S policy and objectives. The review will cover all aspects of the WHSMS and will include findings from audit, compliance reports, safety committee reports, and accident and incident analysis. Should any changes be made to the WHSMS, Council's WHS Safety Committee will be advised together with all parties who will be affected by the change/s.

21.1 Continual Improvement

The concept of continual improvement is embodied in the WHSMS. Improvement will be achieved by continually evaluating the performance of the WHSMS against Council's WH&S policies, objectives and targets for the purpose of identifying opportunities for improvement.

22. Training – WH&S

To ensure that workers are competent to carry out the required functions of their jobs, Council will provide training and development for all workers. In some areas, training will be mandatory, however most training will be identified via the workers performance appraisal and/or requirements in current legislation.

WH&S training will be available to all workers and should be identified through WH&S compliance audits, performance appraisal or organisational requirements. Refresher training will be offered to workers for particular safety areas. A record of all training will be held on Council's skills register. If you believe that you require further WH&S training, you should contact the Human Resources Manager.

23: Toolbox Meeting

Tool Box meetings should be held at the beginning of the job; however this may vary depending on the type of work being carried out. The objective of the meetings is to discuss WH&S issues that may arise in the workplace. Toolbox meetings are a very good forum, which allow workers and contractors to discuss any WH&S issues that they may arise.

It is the Supervisor's responsibility to arrange toolbox meetings. The frequency of such meetings will be dependent on: a change in the working environment, notification of WH&S procedures and/or documentation or if a supervisor has concerns about the gang's WH&S performance. For more hazardous work it may be necessary to have a daily meeting, for less hazardous work once a week may suffice.

Should the supervisor note that there are lapses in WH&S practices in the workplace a toolbox meeting can be called at any time to rectify any unsafe work practices. Toolbox meetings must be documented and kept on site. Once the job is completed documents are to be sent to the WH&S co-ordinator.

24: Visitors Onsite

Authorised persons must report to the site supervisor before entering the worksite. Any person arriving at a worksite that does not have appropriate authorisation from the Dir Engineering Services should be sent to the Council office to obtain such authority before being accepted onto the worksite. Appropriate signage where applicable should be displayed at the entrance to the workplace. All visitors are to receive appropriate *Site Specific Safety Induction* and where required, issued with protective clothing.

Should the Supervisor become concerned about unauthorised visitors, who are either on or near the worksite, and the presence of the visitors may jeopardise the safety of workers and/or the visitors themselves, work will cease immediately. The unauthorised visitors will be immediately instructed to move to a safer area. Should the visitor/s refuse to move, the Supervisor shall contact the Police and advise them that unauthorised visitors are present at the workplace and that they pose a danger to themselves and/or your workers and you require the Police to remove them. The visitor/s will be informed that the Police have been notified. The Supervisor should also contact the Risk Manager.

25: Volunteers

The Act class's volunteers as workers therefore volunteers are Volunteers are classed as workers under the Act and are to be treated according to the Act for WH&S matters.

25.1 General Responsibilities of Volunteers

A potential source of difficulties with volunteers is a failure of Council to work with the volunteers to ensure they have an understanding of their responsibilities and the boundaries which Council has set to the activity.

Council is to ensure that the volunteer group has undertaken hazard identification and risk assessment with regard to the activities which the volunteer will perform on behalf of Council. It is important that Council provides the volunteer/s with sufficient information as to the nature of the activity so that the volunteer is in a position to make an informed decision as to the potential range of hazards and the necessary risk control measures.

26: Notifications of Proposed Work to SafeWork

An employer must not commence to carry out work of the following kind at a place of work unless the employer has given Regulator notice of the proposed work:

26.1 Restricted Carcinogens

Before any restricted carcinogens are used, handled or stored, you must apply in writing for authorisation from SafeWork. Restricted carcinogens are listed in schedule 10 of the Regulation.

It is the responsibility Council to ensure the application is made correctly and that authorisation is obtained before any restricted or prohibited carcinogen is used, stored or handled. Council must complete the application form on the SafeWork website and follow the instructions to lodge the application.

26.2 Lead Risk Work

To identify Lead Risk Work go to Chapter 7 Part 7.2 Division 3 Clause 402 of the Regulations. If the workplace determines that work at the workplace is lead risk work, Council must give the regulator written notice within 7 days that the work is lead risk work.

26.3 Asbestos Removal Work

Chapter 8 of the Regulations set out the process and duty of care involved for Asbestos removal work. Council workers **WILL NOT** engage in any removal work and a licenced operator must be obtained to remove Asbestos.

26.4 Demolition Work

Under Chapter 4 Part 4.6 Division 1 Clause 142 of the Regulations the following is classed as demolition work and as such notice must be given to the regulator in accordance with this clause at least 5 days before the work commences:

- Demolition of a structure, or a part of a structure that is loadbearing or otherwise related to the physical integrity of the structure, that is at least 6 metres in height
- Demolition work involving load shifting machinery on a suspended floor
- Demolition work involving explosive

For further information in relation to notifying SafeWork call 13 10 50.

27: Work Practice Responsibilities and Procedures

27.1 Amenities Responsibilities

27.1.1 Council

Council is to ensure where practicable workers have access to amenities. Council is to ensure there is in place, a system for the provision, maintenance and cleaning of all amenities provided. Council must take in to consideration the following:

- The nature of the work undertaken at the location
- The size and location of the place of work
- The number of staff at the place of work
- The duration of the activity
- Access to council premises and other Council amenities in the locality

27.1.2 Managers

Managers are to ensure that amenities are provided on site before a construction activity commences, and ensure arrangements are in place for maintenance/cleaning of amenities.

27.1.3 Supervisors

Supervisors are to keep under review the provision of workplace amenities to ensure they are adequate. They must ensure they are in good working order and are fit for the purpose. Supervisors are to arrange for repair and cleaning of amenities.

27.1.4 Workers

Workers are to ensure the amenities are used for the intended purposes and not misused or damaged. Workers are to cooperate with supervisors to ensure the amenities are kept in good order. Workers are to report any defects or requirements for repair or cleaning to their supervisor.

27.1.5 Procedures

Consult with workers regarding the provision of amenities.

27.1.6 Types of Amenities

Change rooms, meal rooms, toilets, washing facilities, showers, drinking water, lockers.

27.2 Armed Hold Up Procedures

All Council workers must be aware of the procedures to follow in the event of an armed hold-up. Council is to adopt a Policy on Armed Hold Up. Council will provide training to all staff that may be exposed to armed-hold up.

****Survival is the first rule during an armed hold-up. Protect yourself, NOT money or goods!**
****Robbery victims who resist were 49 times more likely to be KILLED than those who cooperate!**

27.2.1 What to do in the event of an armed robbery

It is critical for businesses to have armed robbery procedures and for staff to be familiar with them. During an armed robbery, it is important to stay calm. The overall aim is to try to ensure the offender leaves the premises as soon as possible, without injuring or harming anyone. You and your staff should learn the acronym 'CODE A' prior to any incident, so you are prepared if you are the victim of an armed robbery.

CODE-A

Calm Try to remain calm. Stay away from the personal space of the offender

Obey instructions. Avoid making any sudden or unexpected movements

Description Note the features of the offenders, including clothing, scars, tattoos, height, hair colour, accent and speech and any weapons used

Evidence Remember what is touched by the offender and do not touch it yourself

Alarm Activate the alarm and call police on Triple Zero (000) when it is safe

27.2.2 After a hold-up

- Call police as soon as you can and provide your name, address and premises details, description of the offender/s and vehicle, and their direction of travel
- Close the premises to the public and isolate the areas where the offender/s confronted staff
- Ask witnesses to remain to assist police
- Avoid conferring with other witnesses about the offence and provide versions independently
- Complete offender description forms
- If contacted by the media, speak to police first. Incorrect statements could jeopardise the investigation or court proceedings. Avoid discussing the amount of property stolen.
- Consider counselling and support for staff

27.2.3 Identifying Robbers

The police will want to interview all witnesses to an armed hold-up to try and establish the identity of the robber(s) as quickly as possible.

During the robbery observe the following details about the robber(s) only if you can while doing exactly as directed:

- Height
- Weight
- Clothing – including unusual marks, stains and tears.
- Age
- Hair colour
- Eye colour
- Identifying marks - scars, tattoos etc.
- Prominent or unusual features
- Speech patterns, impediments
- Type of weapon

Use the Offender Identification Form in the back of this booklet to help police with their investigations. It can help to estimate height by marking a door near to the cash handling area with height marks. Do not follow robbers when they leave the premises. Observe the following details about the get-away car only if safe to do so.

- Registration Number
- Make
- Year
- Colour
- Direction of travel

27.2.4 Ongoing Service to the Public

Following the hold-up, Relief Customer Service Officers will be appointed to enable continuation of customer service.

Appendix No 4 – Offender Identification Form – WINT/17/70

27.3 Atmospheric Contaminants

To ensure the safety of all persons who could be exposed to atmospheric contaminants and comply with the Act and Regulations as defined in Chapter 3 Part 3.2 Division 8 of the Regulations.

27.3.1 Definition

An atmosphere is a hazardous atmosphere if:

- The atmosphere does not have a safe oxygen level, or
- The concentration of oxygen in the atmosphere increases the fire risk, or
- The concentration of flammable gas, vapour, mist or fumes exceeds 5% of the LEL for the gas, vapour, mist or fumes, or
- Combustible dust is present in a quantity and form that would result in a hazardous area

27.3.2 Controlling

Under current legislation, atmospheric contaminants must be controlled so they do not exceed safe limits. A distinctive or unusual smell *may* alert a worker to the presence of an atmospheric contaminant. The COP Managing the Work Environment and facilities states that Work processes that release harmful levels of airborne contaminants (e.g. lead fumes, acid mist, solvent vapour) will require specific control measures to remove them at the source, such as local exhaust ventilation.

Workplaces inside buildings may have natural ventilation, mechanical ventilation (fans or extraction units) or air-conditioning. An air-conditioning system should:

- Provide a comfortable environment in relation to air temperature, humidity and air movement
- Prevent the excessive accumulation of odours
- Reduce the levels of respiratory by-products, especially carbon dioxide, and other indoor contaminants that may arise from work activities
- Supply an amount of fresh air to the workplace, exhaust some of the stale air as well as filter and recirculate some of the indoor air

27.4 Biological Risks

Biological agents are living things, or substances produced by living things, that can cause illness or disease in humans. Biological agents have many uses in the workplace, but some of them can be hazardous. They include bacteria, viruses, and fungi as well as larger organisms such as parasites and plants.

Persons who are most at risk from biological hazards include those who work with animals or plants or in health and child care, work with cutting oils or ventilation systems or work in municipal sanitation or sewage operations.

27.4.1 Biological Risk Controls

- Controls at the source involve eliminating or reducing exposure through elimination, isolation or containment of hazards, through proper equipment design
- Equipment - especially ventilation systems, which might harbour bio-hazards - must be regularly maintained, cleaned and sterilized
- Where the hazard cannot be contained, steps can be taken to ensure that the hazard does not spread. Those inside the area must follow safe work practices and use protective equipment. Measures must be taken to ensure that contaminated protective equipment does not pose a threat

- Biological safety cabinets protect against exposure by forcing the surrounding air into a system that filters or captures the hazard
- Controls include cleaning and disinfecting as well as the safe disposal of waste
- Control for workers may involve personal protective equipment e.g. gloves & masks
- Immunisation programs may be appropriate in some circumstances (Hepatitis A & B, Tetanus, Zoonotic Diseases {Q fever})
- All contaminated equipment or material should be contained, labelled and isolated.
- Spills should be cleaned up immediately
- No one should eat, drink or smoke in a potentially hazardous work area
- Showers, lockers and laundry facilities should be used to prevent hazards from leaving the workplace

Risk of harm by staff direction with chemical, biological or radiological materials in a work place is highly unlikely, but such an incident would be potentially life threatening. The following information from *Emergency Management Australia* would assist in the event of such a situation.

Hazard: Chemical Agents	Hazard: Handling Mail, Anthrax, Biological Agents	Hazard: Radiological Agents
o Chemical agents may be solid, liquid or gas (odourless, colourless or tasteless), inhaled, ingested or absorbed through the skin. o Effects can be immediate or delayed – incapacitation, serious injury or death depending on dose. o May be let loose by a spraying device, leaking package, container or explosive. **If you think you might have been exposed to a chemical agent:** 1 Hold your breath – move from site as soon as possible. 2 If outdoors – move upwind; if indoors – move outside. Cover face with cloth if possible. 3 If droplets of chemical are on clothing or skin, remove outer clothing immediately. Wash exposed skin with cold water. 4 Isolate scene if possible – prevent unprotected persons from entering. If you feel effects such as shortness of breath, dizziness, choking, dimming of vision or muscular twitching, seek **medical assistance** immediately. **Call OOO** – advise Fire Brigade of a *chemical incident* giving details of: ➢ Exact location (street address…) ➢ Wind direction (wind is blowing from…) ➢ Estimated number of victims ➢ Victim's symptoms **If approaching upwind of incident** ➢ Keep hands away from face – avoiding contaminating eyes, nose and mouth ➢ If possible wash your hands ➢ Shut down building ventilation system, turn fans off ➢ Wait for help to arrive. *Remember* ➢ Remain calm ➢ Don't touch, eat, taste or smell the substance ➢ Keep upwind ➢ Report it via OOO to the Fire Brigade	o People handling mail should be aware of Emergency Procedures for responding to and reporting *suspicious articles* (packages/devices suspected of containing biological agents). Most reported suspicious packages are false alarms. o It is impossible to say if you've been a victim of a biological attack at the time, as it is invisible to the senses. **If you suspect you might have been, take these steps:** 1 Don't disturb package any further. Don't pass it around. 2 Don't clean up the powder or liquid or brush off clothing. 3 Place an object over package without disturbing it (e.g. large waste bin). 4 Stay where you are (applies to co-workers in same room). 5 Isolate scene if possible – prevent unprotected persons from entering. Remember you are not in immediate danger. 6 Call **for help – OOO** or your supervisor. Ask for Fire HAZMAT depending on your situation. Advise supervisor or operator: ➢ Exact location (street address) ➢ Number of people potentially exposed ➢ Description of package/device ➢ Any action taken (e.g. covering package with coat, area isolated) **Other biological agents** ➢ Bacteria – Plague (as well as Anthrax) ➢ Viruses – Smallpox, Viral Haemorrhagic fever ➢ Toxins – Poisons, Ricin, Botulism ➢ Ingested or inhaled ➢ Effects usually delayed (hours, to days, even weeks) ➢ Requires dispersion device like an aerosol If possible, sorting and processing of mail/packages should be conducted in an area which can be easily contained.	Radiological materials are invisible to the senses. It is unlikely you'll know whether you've been exposed unless you see radiation warning symbols on a device. Types of radiation: o Alpha (travels only centimetres – generally won't penetrate skin) o Beta (travels a few metres – more penetrating – may cause burns to skin) o Gamma (very penetrating – travels tens/hundreds of metres) o Likely to be material such as radioactive medical or industrial isotopes, combined with explosive or incendiary material. o Effects – vomiting, fatigue, skin burns, bleeding, increased risk of infection, hair loss (depending on dose). o Dissemination – Most likely by explosion. **If you suspect you have been exposed or are being exposed to radioactive material:** 1 Keep exposure time to radioactive material to a minimum 2 Move away from source – the further the better. 3 Attempt to shield yourself from radiation with heavy or thick material. 4 Place cloth over mouth if you think radioactive particles are in the air. 5 Move upwind. 6 Consider removing outer clothing if you think radioactive particles may have lodged in your clothing. 7 Wash exposed skin and hair areas. 8 Seek medical advice. 9 **Call 000** – advise Fire Brigade you've been exposed to radioactive material. Advice: ➢ Exact location of incident/device ➢ Wind direction ➢ Description of incident/device ➢ Is radioactive material on fire ➢ Approximate number of people exposed.

27.5 Plant Licencing and Competencies

The COP for Managing Risk of Plant in the Workplace state that certain kinds of plant, such as forklifts, cranes and some pressure equipment, require a licence from the WHS regulator to operate and some high-risk plant must also be registered with the WHS regulator.

Competent person means a person who has acquired through training, qualification or experience the knowledge and skills to carry out the task. A competent person has a more specific meaning in the following circumstances:

- For design verification, the person must have the skills, qualifications, competence and experience to design the plant or verify the design
- For inspection of plant for registration purposes the person must have educational or vocational qualifications in an engineering discipline relevant to the plant being inspected, or knowledge of the technical standards relevant to the plant being inspected.
- For inspection of mobile cranes, tower cranes and amusement devices the person must
    - have the skills, qualifications, competence and experience to inspect the plant, and be registered under a law that provides for the registration of professional engineers (in jurisdictions where such a law exists), or
    - be determined by the WHS regulator or deemed competent by internal systems

27.6 Confined Spaces

A confined space is determined by the hazards associated with a set of specific circumstances and not just because work is performed in a small space. The COP for Confined Spaces defines a Confined Space as:

A confined space means an enclosed or partially enclosed space that:

- is not designed or intended primarily to be occupied by a person; and
- is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and
    - is or is likely to be a risk to health and safety from: an atmosphere that does not have a safe oxygen level, or
    - contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion, or
    - harmful concentrations of any airborne contaminants, or
    - engulfment

27.6.1 What is NOT a Confined Space

The COP for Confined Spaces defines the following as NOT a confined space for the purpose of the Regulations.

- A confined space does not include a mine shaft or the workings of a mine
- The following kinds of workplaces are also generally not confined spaces for the purposes of the WHS Regulations:

- places that are intended for human occupancy and have adequate ventilation, lighting and safe means of entry and exit, such as offices and workshops
- some enclosed or partially enclosed spaces that at particular times have harmful airborne contaminants but are designed for a person to occupy, for example abrasive blasting or spray painting booths

- enclosed or partially enclosed spaces that are designed to be occasionally occupied by a person if the space has a readily and conveniently accessible means of entry and exit via a doorway at ground level, for example: a cool store accessed by a LPG forklift to move stock – although the use of a LPG forklift in a cool store can be hazardous, the door at ground level means that once the alarm is raised, escape and rescue can happen quickly
- a fumigated shipping container with a large ground level opening will facilitate easy escape and rescue
- Trenches are not considered confined spaces based on the risk of structural collapse alone, but will be confined spaces if they potentially contain concentrations of airborne contaminants that may cause impairment, loss of consciousness or asphyxiation

27.6.2 Supervisors Responsibilities

Supervisors are responsible for ensuring tasks are carried out according to procedures, identifying and assessing work in a confined space and authorising entry to a confined space, and that all safety equipment is in good working condition.

27.6.3 Workers Responsibilities

Workers are responsible for carrying out all activities in a safe manner in accordance with training undertaken and following safe work methods and permit to work procedures.

Refer to SWMS – WC-S06 Confined Spaces– WINT/17/269
Refer Confined Spaces Procedure – WINT/17/1121

27.7 Danger Tags – Lockout Procedure

Danger Tag is a red & black tag used to indicate the isolation of an energy source, to identify the person to be protected by the isolation and the status of equipment and machinery regarded as unsafe in normal usage conditions.

27.7.1 Managers Responsibilities

- The implementation of this procedure in their area of responsibility
- Consulting with and coaching workers in the implementation of this procedure
- Monitoring worker conformance to the requirements of this procedure

27.7.2 Workers Responsibilities

- Not placing themselves or others at risk of injury
- Conforming to the requirements of this procedure
- Consulting with Managers and other workers in relation to a hazard analysis associated with energy isolations and out of service requirements

Refer to SOPS – Lockout – WINT/17/1121

27.8 Disposal of Needles and Syringes

Definitions:	HIV	Human Immunodeficiency Virus
	HBV	Hepatitis B Virus
	HCV	Hepatitis C Virus

27.8.1 What to do if you find a syringe

The National Safety Council Australia (NSCA) advise that the inappropriate disposal of syringes is an increasing community health risk. Syringes are often not disposed of in a safe manner and are left where other people, including employees and customers, may be exposed to the risk of a needle stick injury. Workers and others at the workplace can inadvertently be exposed to the risk of a needle stick injury from a contaminated syringe, which may present a health risk.

Syringes may be clearly visible or may be disposed of within containers or hidden amongst other rubbish, products or clothing etc. Therefore it is imperative that employees receive adequate training in dealing with and disposing of inappropriately disposed syringes. NSCA advise that workers should never:

- end, break, recap or otherwise manipulate needles
- Place their hands into areas where their hands or fingers are not clearly
- Visible (e.g. into garbage bags and crevices)manually compress garbage bags
- Hold garbage bags close to their body
- Hold garbage bags by the base of the bag

27.8.2 Solution

Employees should wear puncture resistant gloves where there is a possibility of contact with carelessly disposed syringes in the workplace or in the work process (e.g. sorting of rubbish or discarded clothing etc). If a syringe is discovered the following steps should be taken, as a minimum, to protect against the potential health risks associated with a needle stick injury.

Step 1 Do not touch the syringe before obtaining the designated equipment (where available). Do not improvise equipment if the designated equipment is unavailable
Step 2 Do not attempt to handle the syringe by hand. Warn others of the threat. If the syringe poses an immediate threat to the well-being of others in the area (i.e. a busy children's playground), the safest way to retrieve the syringe is to hold the barrel of the syringe in a gloved hand.
Step 3 Obtain the designated equipment, which should include gloves, a sealable, puncture resistant, container or an approved contaminated waste container, and forceps or tongs.
Step 4 Take the equipment to the syringe.
Step 5 Wear puncture resistant gloves.
Step 6 Open the container and place on a stable, level surface. Do not hold the container because a misdirected needle may contact the hand or forearm and result in a needle stick injury.
Step 7 Do not attempt to bend, break or re cap the needle.
Step 8 Using forceps or tongs, pick up the syringe, preferably at the opposite end (barrel) of the needle.
Step 9 Carefully place the syringe into the container, needle end first (**DO NOT** force the needle into the container). Obtain a larger container
if the syringe does not fit.
Step 10 Seal the container.
Step 11 Contact the local council or health service for information on appropriate disposal of the syringe.
Step 12 If tongs or another designated pick up tool has been used, clean the item with detergent and warm water (while wearing impermeable gloves), then immerse the tool in a bleach solution for a least one minute. Air-dry and replace tongs/tool in appropriate area

for future use. This Procedure will ensure that staff is aware of the precautions which should be taken when disposing of needles and syringes found during the course of their duties.

27.8.3 Potentially Positive (status unknown) for HIV, HBV, HCV

Baseline testing for HIV antibody, anti-HBV or anti HCV will be carried out by the attending doctor. The doctor will initiate appropriate treatment and advice regarding the exposure of HIV, HBV, and HCV. The treating doctor will advise you of your status following pathology, which usually takes approximately 10 working days.

Workers who have received a puncture wound or cut from a needle or other implement that may be contaminated with blood should:

- Not donate blood.
- Protect sexual partners from contact with blood, semen or vaginal fluids by using condoms.
- Avoid pregnancy until HIV status is known.
- Do not breastfeed.
- Consider work practices, in particular do not perform exposure prone procedures (first aid) or participate in contact sports.

27.9 Drugs and Alcohol

Managers and Supervisors need to take a personal interest in their workers in a caring and sensitive way. Where personal problems exist, and where the supervisor's personal intervention is not unwelcome, the Supervisor should try to help by identifying work related stresses that are adding to the problem, and seeing if there are reasonable alternative arrangements that will ease the problem (such as separating individuals who are in conflict). In severe cases of drug and alcohol use, the worker should be encouraged to make use of professional help.

A worker whilst engaged in Council business must not be adversely affected by alcohol or other drugs. Any worker driving a Council vehicle must not drive under the influence of alcohol or drugs.

27.9.1 Drugs

27.9.2 Prescribed & Over the Counter

The possession and/or use of medications, including prescribed and over-the-counter drugs, is prohibited except when prescribed by a medical practitioner or permitted by law. Workers taking prescribed drugs should be aware of the side effects of their medication. If instructions cannot be followed or tasks carried out safely due to drowsiness or other condition the supervisor should be informed so necessary accommodations for the worker can be made. Poor performance or unsafe behaviour due to alcohol/drugs justifies disciplinary action.

27.9.3 Illicit

No worker shall unlawfully possess, use, sell, or distribute illicit drugs while engaged in Council business or on Council premises. Managers, supervisors and workers should refer to Council's Alcohol and Drug Policy for further information.

27.10 Electrical Safety

The COP for Managing Electrical Risks in the Workplace outlines "What is an Electrical Risk" as:

Electrical risks are risks of death, electric shock or other injury caused directly or indirectly by electricity. The most common electrical risks and causes of injury are:

- Electric shock causing injury or death. The electric shock may be received by direct or indirect contact, tracking through or across a medium, or by arcing. For example, electric shock may result from indirect contact where a conductive part that is not normally energised becomes energised due to a fault (eg metal toaster body, fence)
- Arcing, explosion or fire causing burns. The injuries are often suffered because arcing or explosion or both occur when high fault currents are present
- Electric shock from 'step-and-touch' potentials
- Toxic gases causing illness or death. Burning and arcing associated with electrical equipment may release various gases and contaminants
- Fire resulting from an electrical fault

Even the briefest contact with electricity at 50 volts for alternating current (V a.c.) or 120 volts for direct current (V d.c.) can have serious consequences to a person's health and safety. High voltage shocks involving more than 1000 V a.c. or 1500 V d.c. can cause contact burns and damage to internal organs.

Electric shocks from faulty electrical equipment may also lead to related injuries, including falls from ladders, scaffolds or other elevated work platforms. Other injuries or illnesses may include muscle spasms, palpitations, nausea, vomiting, collapse and unconsciousness.

Workers using electricity may not be the only ones at risk – faulty electrical equipment and poor electrical installations can lead to fires that may also cause death or injury to others. Electrical hazards in the workplace include electrical wiring, electrical machinery, equipment or appliances. Testing of all electrical equipment should be completed by a qualified person and completed as prescribed in the COP.

27.10.1 Responsibilities

27.10.2 Council

Contractors are to be used for all of Council's Electrical work until such time that Council has a fully qualified Electrician is engaged. Council is responsible for ensuring there is a safe system of work in place with regard to electrical installation or circuitry work.

27.10.3 Managers

Managers are responsible to ensure the procedures are implemented.

27.10.4 Supervisors

Supervisors are responsible for ensuring tasks are carried out according to procedures.

27.10.5 Workers

Workers are required to follow correct safety procedures when dealing with electrical equipment. They are responsible for carrying out all activities in accordance with training.

27.10. 6 Procedures

- Follow safe work practices to minimise the risk of injury from electricity.
- Isolate equipment/machinery in accordance with safe operational procedures
- Keep electrical equipment in safe working order by routine inspection & maintenance

- Electrical equipment or machinery must be isolated prior to cleaning or routine maintenance work being carried.
- Extension leads can be joined provided that the total length of any such combination dose not exceed the maximum length for the cord size and rating as per Code 2007 (Electrical practices for construction work)
- If safe to do so, disconnect damaged electrical equipment and label
- "DO NOT USE - TO BE TESTED" in a clear manner.
- Switch off at power source before pulling plugs
- Report hazardous situations immediately. These hazards may include:-
  - Cracked equipment
  - Burnt outlets
  - Burning smells
  - Torn insulation on extension cords

ONLY APPROPRIATELY QUALIFIED PERSONNELL ARE TO REPAIR ELECTRICAL EQUIPMENT

ONLY APPROPRIATELY QUALIFIED OR EXPERIENCED PERSONNEL ARE TO CARRY OUT TESTING OF ELECTRICAL EQUIPMENT

NOT ALL ELICTRECAL EQUIPMENT REQUIRES TESTING REFER TO COP – MANAGING ELECTRICAL RISKS IN THE WORKPLACE

For guidance on appropriate inspection and testing intervals, seek the advice of a competent person (see below). Further guidance may be included in AS/NZS 3760:2010 *In-service safety inspection and testing of electrical equipment* and the manufacturer's recommendations.

As a general rule electrical equipment used in the specified higher-risk operating environments should be tested at least once every 12 months. More frequent testing may be required, for example in relation to:

- electrical equipment used in manufacturing and workshop environments (eg at least once every 6 months)
- commercial cleaning equipment (eg at least once every 6 months)
- hire equipment (eg at least once every 3 months)

27.11 Emergency Procedures

Emergency response procedures are in place so that all workers are aware of what is expected of them and how they should act. Council is responsible for ensuring that each building, including depots, workshops, public buildings and recreational facilities, has an evacuation plan. All workers are required to participate in simulated emergency evacuations and fire drills bi-annually.

27.11.1 Emergencies Include

- Fire and explosion
- Smoke
- Structural faults
- Bomb threats
- Leakage of gas
- Civil disorder
- Earthquake
- Storm and tempest

27.11.2 Procedure

If in the event of an emergency requiring evacuation, workers:

- Must use the nearest safe exit
- Are requested to take only their personal effects
- Must meet for a roll call at their designated assembly point
- WCCC workers are to use the hospital procedure

Workers are not to place themselves or other persons at risk and at all times are to follow the directions of the wardens or emergency services. Council must ensure that all records on hazardous substances are kept at the employer's work place and are made available on request to SafeWork and other emergency services.

27.12 Excavation

The COP for Excavation Work defines excavation work to be - Excavation work generally means work involving the removal of soil or rock from a site to form an open face, hole or cavity using tools, machinery or explosives.

Specific duties apply in relation to the higher-risk excavations, such as trenches, shafts and tunnels. However, these requirements do not apply to a mine, a bore to which a relevant water law applies or a trench used as a place of interment.

Any construction work (including any work connected with an 'excavation') that is carried out in or near:

- a shaft or trench with an excavated depth of greater than 1.5 metres, or
- a tunnel
- is considered to be 'high risk construction work' for which a safe work method statement (SWMS) must be prepared.

Refer to SWMS – WC-S07 Excavation and Trenching Work– WINT/

27.12.1 Causes of Trench Collapse

- Type of soil (sand, loam, clay, rock)
- Moisture content of soil
- Length of time trench remains open
- Vibrations caused by heavy traffic
- Pressure from loads imposed by nearby buildings
- Previous excavation works parallel to the new trench
- Adverse weather conditions
- Loads stacked too close to the trench

27.12.2 Prevention of Collapse or Failure of Trenches and Open Excavations

Injuries resulting from collapse of trenches and open excavation have occurred in the past as a result of the inability of the soil to support itself for the duration of the work and as a result of decisions taken by persons with insufficient expertise in the area of soil stability. A risk assessment should be conducted to determine which controls will be implemented to prevent persons being injured by collapse or failure of all or part of the excavation.

27.12.3 Shoring

It is a legal requirement that where necessary, all trenches and excavations must be adequately shored or supported to prevent a fall or dislodgment of earth, rock or other material.

27.12.4 Controlling risks in Excavation Work

The following table lists common hazards associated with excavation work and examples of control measures:

Potential hazards	Examples of control measures
Ground collapse	The use of benching or the installation of ground support (eg shoring)
Water inrush	Pumps or other dewatering systems to remove water and prevent build-up
Falls	Ramps, steps or other appropriate access into the excavation
Hazardous manual tasks	Rotating tasks between workers
Airborne contaminants	Mechanical ventilation to remove airborne contaminants
Buried contaminants (eg asbestos)	Training to identify buried contaminants and what action to take
Underground services	Obtain information from the relevant authorities on the location of underground services.

27.13 Explosive Materials

27.13.1 Authority to use Explosives

The use of explosives will be limited to those people who have a current Unsupervised Handling Licence and Blasting Explosive Users Licence. Only explosives that have been approved for the use in the intended application shall be used.

27.13.2 Storage of Explosives

A separate magazine, that meets the requirements of AS: 2188, shall be provided for blasting explosives and detonators. The magazines shall be separated from each other. **Detonators and devices incorporating detonators shall not be stored with other explosives.**

27.13.3 Responsibilities

27.13.4 Council

Council is responsible for ensuring there is in place a system for the safe management of dangerous goods on Council premises, including

- Identification and labelling
- Storage
- Emergency equipment in place
- Appropriate training
- Inspection and auditing
- Licensing and registration
- A register of storage is kept

27.13.5 Managers

Managers are responsible for ensuring the procedures are implemented.

27.13.6 Supervisors

Supervisors are responsible for ensuring tasks are carried out according to procedures and licence requirements, inspection of stores and staff training in correct procedures.

27.13.7 Workers

Workers are responsible for carrying out all activities in a safe manner with regard to training undertaken. They are to advise supervisors of any incompatible storage, and are to be familiar with emergency procedures.

27.13.8 Procedures

- Consult with staff about storage, transport and use in the workplace
- Complete a risk assessment for all work activities
- Implement control measures in an agreed time frame
- Review annually and record

27.14 First Aid

Council is responsible for ensuring there is in place arrangements for the provision and maintenance of first aid kits, and that there is immediate implementation of first-aid procedures for all injuries including apparently minor cuts and scratches is essential.

All outdoor staff will be first aid trained so as when the composition of workgroups change there will still be a first aid trained person at each work site. All workers will have access to a first aid kit – there is a maintained kit in every vehicle. This kit should be kept fully stocked and properly maintained and this responsibility will rest with the driver of the vehicle. In the event of serious injury beyond the scope of first-aid treatment, appropriate medical treatment should be arranged as soon as practicable.

Where workers use pesticides or other hazardous substances pathological tests are to be taken in accordance with the COP for Managing Risk of Hazardous Chemicals in the Workplace.

Council requires pre-employment medicals Certificate of Capacity for injuries where a claim for Workers' Compensation is involved. All incidents regardless of how minor require an Incident form to be completed.

27.15 Floors, Stairs, Landing, Walkways and Passageways

Walkways shall be designed for the dead load of the designed structure plus one of the following minimum imposed loadings, whichever produces the more adverse effect:

- a superimposed live loading of not less than 2.5 kPa uniformly distributed; or
- a concentrated loading applied through a 0.01 m2(100 mm × 100 mm) pad of not less
- than 1.1 kN at any point;

Where the walkway is likely to incur loads exceeding those given in items (a) or (b) above, reference shall be made to AS/NZS 1170.1 for appropriate imposed loads.

Stairways and integral landings shall be designed for the dead load of the stairway structure plus a superimposed live loading of not less than 2.5 kPa uniformly distributed on each tread and landing. A maximum deflection of L/200 in the horizontal length of the stairway including landings, where connected, is permitted. Where the stairs are likely to be loaded in excess of the above requirements, the design loading shall be based on the requirements of AS/NZS 1170.1 for imposed actions.

For full details of requirements for Floors, Stairs, Landing, Walkways and Passageways the Australian Standard AS1657-2013 should be accessed.

Walking surfaces, including steps, treads and rungs, shall be slip resistant. Guidance in the identification and reduction of slip hazards is given in AS/NZS 3661.2 and HB 197. Suitable test methods of slip resistance for pre-existing and new surfaces can be found in AS 4586 and AS 4663.

- No worn or broken stairs to be used
- Handrails must be in good condition
- Stairs and landings must be free of obstructions at all times
- There must be adequate lighting on stairs and landings
- There must be emergency lighting where appropriate
- Non-slip treatments and treads must be in good condition
- Kick plates will be provided where required
- All stairs and landings will be clear of debris and spills
- Stairs and landings must be used correctly

NOTE: It is very important for designers and specifiers to note that the issue of slip resistance must be addressed to ensure this common form of accident is minimised, and the treatment needs to be in accordance with the likely use of the installation, especially in locations where material buildup, oils and liquids may be present, where users shoes may have slip inducing material on them and where sloping surfaces may exist. Additionally, some grid style flooring has superior grip in one direction to that at 90 degrees – this also needs to be considered when selecting products. Designers are strongly advised to take account of such issues when selecting flooring materials and to ensure a comparison is made between products before a final decision is made.

Note: For disabled access Australian Standard AS1428 should be accessed to gain the most up to date specifications.

27.16 Gas Cylinders

If you need to use industrial gases the following guidelines must be observed:

- Always check the gas name label and colour code before use
- Check that connection hoses and couplings are suitable and in good condition
- Make sure that work with gases is carried out in a well ventilated area
- Always keep cylinders upright and secured in racks or with chains
- When moving cylinders keep them secured from being knocked over or falling
- If you are going a cylinder without a suitable truck or trolley close the cylinder valve and remove the regulator
- **DO NOT** store or use cylinders in hot places
- Keep your cylinders far enough away from cutting work to stop sparks or hot slag reaching them
- **NEVER** use oxygen as a substitute for compressed air

BOC Australia have published a Gas Cylinder Safety guideline which are in line with Australian Standards and Council have sourced information from this guideline.

Since gases are invisible their presence is not readily identifiable and they have the potential to asphyxiate burn or harm users. Each year in Australia, there are incidents which involve the use of compressed or liquefied gases. Many of these could have been avoided if the user had followed information contained in the Safety Data Sheet (SDS).

27.16.1 Know Your Gases

27.16.2 Label

The label is the primary means of identification of the cylinder contents (see next page). If the label is illegible or missing, DO NOT use the cylinder but return it to the gas company for a satisfactory replacement.

27.16.3 Cylinder Colour

Cylinder colour is the secondary means of identification of the nature of the cylinder contents and the nature of the hazard associated with the gas contained in the cylinder. Compressed gases will be stored and mainly used from outside buildings.

Refer - SOP Oxy Fuel Gas Welding

27.16.4 Gases Hazard Classifications

Main gases hazard classifications. Special precautions when handling.

Class Diamonds	Australian Standards Definition	Cylinder Colour Identification*
 Toxic	A gas that is known to be a) toxic or corrosive to humans as to pose a hazard to health; or b) presumed to be toxic or corrosive to humans because it has an LC 50 value equal to or less than 5000 ml/m³ (ppm).	Hues of Yellow
 Flammable	A gas which will burn in air at a pressure of 101.3 kPa absolute.	Hues of Red
 Oxidising	A gas which gives up oxygen readily, removes hydrogen from a compound, or readily accepts electrons.	Hues of Black, White, or bright Blue
 Non-flammable, non-toxic	A gas which is non-flammable, non-toxic, non-oxidising, and is resistant to chemical action under normally encountered conditions.	Hues of Brown, Green or dark Blue

**For non imported gases*

Primary hazards for commonly used industrial gases are given below:

Major Hazard	Gas	Cylinder Colour	Characteristics
Asphyxiant	**Carbon Dioxide**	Green Grey AS No. N32 	▪ Can cause the nose to sting. ▪ Will collect in ducts, drains and low lying areas. e.g. cellars. ▪ At high concentrations, instant unconsciousness may occur followed by death. ▪ Much heavier than air.
Asphyxiant	**Nitrogen**	Pewter AS No. N63 	▪ Odourless. ▪ No warning signs before unconsciousness occurs. ▪ At high concentrations almost instant unconsciousness may occur, followed by death. ▪ Heavier than air. ▪ Does not burn. ▪ Largely Inert.
Asphyxiant	**Argon**	Peacock Blue AS No. T53 	▪ Odourless. ▪ No warning signs before unconsciousness occurs. ▪ At high concentrations almost instant unconsciousness may occur, followed by death. ▪ Heavier than air. ▪ Does not burn. ▪ Inert.
Asphyxiant	**Helium Balloon Gas**	Brown AS No. X54 	▪ Inert but asphyxiant at high concentrations – lighter than air. ▪ DO NOT INHALE UNDER ANY CIRCUMSTANCES.
Flammable Extremely hazardous	**LPG**	Silver, grey or galvanised 	▪ LPG is 'stenched' (odourised) and has a distinctive odour. ▪ It will ignite and burn instantly from a spark or piece of hot metal. ▪ Is heavier than air and will collect in ducts, drains etc., and low lying area ▪ Fire and explosion hazard. ▪ Highly flammable. ▪ Eliminate all ignition sources.
Flammable Extremely hazardous	**Acetylene**	Claret AS No. R55 	▪ Distinctive garlic smell. ▪ Fire and explosion hazards are greater than LPG but it is slightly lighter than air and less likely to collect in ducts and drains. ▪ Requires minimal energy to ignite in air or oxygen. ▪ Do not use with copper, high copper or brass alloys because copper materials form explosive compounds with Acetylene.
Flammable Extremely hazardous	**Hydrogen**	Signal Red AS No. R13 	▪ Odourless. ▪ Much lighter than air. ▪ Will collect at the highest point in any enclosed space unless ventilated at high level. Invisible flame. ▪ Fire and explosion hazard. ▪ Very low ignition energy. ▪ Burns with an invisible flame.
Oxidising Strongly supports and accelerates a flame or fire.	**Oxygen**	Black AS No. N61 	▪ Odourless. ▪ Generally considered non-toxic at atmospheric pressure. ▪ Will not burn, but supports and accelerates combustion. ▪ Materials not normally considered combustible may be ignited by sparks in oxygen rich atmospheres. ▪ No oil, grease or lubricants should come into contact with oxygen.

Illustrations above are intended to be typical only showing colour and label location. They neither reflect the size or shape of cylinders, nor show the cylinder valve or guard (where fitted).

This lists identifies primary hazards only. Other hazards may apply.

27.16.5 Colour Identification

BOC industrial and refrigeration gas cylinder colour identification

Air Based Gases

Air ◆
Industrial Grade 052

Band: Black Body: Pewter

Nitrogen ◆
Industrial Grade 032

Body: Pewter

Oxygen ◆
Industrial Grade 020

Body: Black

Fabrication Gases

Argon ◆
Welding Grade 061

Body: Peacock Blue

Carbon Dioxide ◆
Industrial Grade 081

Body: Green Grey

Shielding Gases

Argoshield® ◆
Light 060
Universal 065
Heavy 064

Bands: Black, Green Grey Body: Peacock Blue

Argoshield® ◆
40 068

Band: Black Body: Peacock Blue

Argoshield® ◆
52 070

Band: Green Grey Body: Peacock Blue

Argoshield® ◆
54 071

Bands: Black, Green Grey Body: Peacock Blue

Argoshield® ◆
100 095

Bands: Green Grey, Brown
Body: Peacock Blue

Stainshield® ◆
075

Band: Black Body: Peacock Blue

Stainshield® ◆
Heavy 092

Bands: Green Grey, Brown
Body: Peacock Blue

Stainshield® ◆
66 093

Bands: Signal Red, Green Grey
Body: Peacock Blue

Stainshield® ◆
69 094

Bands: Black, Brown Body: Peacock Blue

Alushield® ◆
Light 079

Band: Brown Body: Peacock Blue

Alushield® ◆
Heavy 069

Band: Peacock Blue Body: Brown

Argoplas® ◆
5 143
20 144
35 145

Band: Signal Red Body: Peacock Blue

Specshield® ◆
Copper 077

Band: Black Body: Peacock Blue

Fuel Gases

Acetylene ◆
Industrial Grade 040

Body: Claret

Handigas™ LPG ◆
Industrial Grade 112

Body: Silver Grey or Galvanised

Handigas™ LPG ◆
Gas withdrawal 110

Body: Silver Grey or Galvanised

Handigas™ LPG ◆
Liquid withdrawal 110

Top: Royal Blue
Body: Silver Grey or Galvanised

Hydrogen ◆
Industrial Grade 135

Body: Signal Red

Laser Gases

Carbon Dioxide ◆
Laser Grade 131

Body: Green Grey

Oxygen ◆
Laser Grade 128

Body: Black

Helium ◆
High Purity 120

Body: Brown

Nitrogen ◆
Laser Grade 129
Available in packs only

Body: Pewter

Nitrogen ◆
High Purity 234

Body: Pewter

Refrigeration Gases

Refrigerant ◆
R134a 155

Band: Aqua
Body: Galvanised or White

Refrigerant ◆
R22 158

Band: Moss Green Body: Galvanised or White

Refrigerant ◆
R404A 248
Eductor tube Fitted

Band: Brown
Body: Galvanised or White

Refrigerant ◆
R407C 244
Eductor tube Fitted

Band: Brown
Body: Galvanised or White

Refrigerant ◆
R408A 245
Eductor tube Fitted

Band: Brown
Body: Galvanised or White

Refrigerant ◆
R409A 246
Eductor tube Fitted

Band: Brown
Body: Galvanised or White

Refrigerant ◆
R410A 168
Eductor tube Fitted

Band: Brown
Body: Galvanised or White

FR12™ ◆
Refrigerant R416A 249
Eductor tube Fitted

Band: Brown
Body: Galvanised or White

Refrigerant ◆
R507 250

Band: Brown
Body: Galvanised or White

Ammonia
Refrigerant R717 178

Band: Slate
Body: Galvanised or White

Class Diamonds

The gas contents of BOC cylinders are identified by the labels affixed to the cylinders. A cylinder without a label MUST NOT be used, but is to be returned to the supplier. An important part of the label is the class diamond, which represents the characteristic of the gas (as illustrated adjacent). A label with multiple class diamonds indicates multiple associated hazards.

Oxidising Gas
Class 2.2 / 5.1

Diamond: Yellow
Lettering: Black

Flammable Gas
Class 2.1

Diamond: Red
Lettering: Black or White

Toxic Gas
Class 2.3

Diamond: White
Lettering: Black

Non-Flammable, Non-Toxic Gas
Class 2.2

Diamond: Green
Lettering: Black

General definitions

Oxidising
Many materials which will not burn in air may readily ignite and or burn in the presence of an oxidising gas – e.g. oxygen. This includes work clothing and many materials considered non flammable.

Flammable Gas
Flammable gas in the presence of the correct mix of air and an ignition source will lead to combustion.

Toxic Gas
A gas that is known to be so toxic or corrosive to humans as to pose a hazard to health.

Non-flammable, Non-toxic
A gas which is non-flammable, non-toxic, non-oxidising, and is resistant to chemical action under normally encountered conditions. The displacement of oxygen or air by an inert gas may pose a risk of asphyxiation.

Notes
1. Colour names and reference numbers refer to AS 2700
2. Designated cylinder colours comply with AS 4484:2004
3. Numbers in Red are BOC's Gas Code
4. Cylinder valves not shown
5. Refer to Australian Standard definitions

27.16.6 Ordering and Transportation

Ordering gas

Take care when ordering gas. Specify the:

- Gas name (in full)
- BOC account number (Ship to or delivery account)
- BOC Gas Code
- Cylinder Size

For example:

Gas Specifics	Example (Oxygen)
Gas Name	Compressed Industrial Oxygen
Grade (purity)	99.5%
BOC Gas Code	020
BOC Cylinder Size Code	G

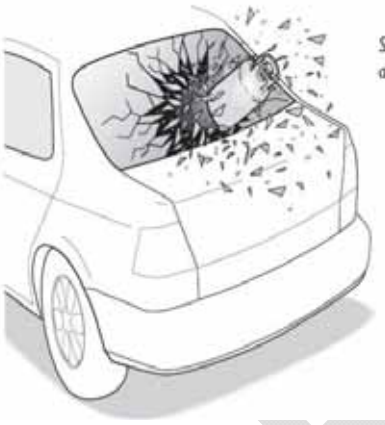
Receipt of cylinders

Many gases cannot be seen; so the primary means of identification of a cylinder's contents is the label.

Only gas cylinders with a clearly legible shoulder or body labels are to be used.

If this is not the case, do not accept it but make arrangements to return and replace the cylinder.

Also check that what you ordered is what is stated on the label and clearly sign the delivery docket.



Small cylinder accident example

Transportation

- **DO arrange for delivery of cylinders.** Goods supplied and delivered by BOC will be loaded, secured, transported and off loaded in accordance with legislative requirements wherever possible.
- **DO find out about transporting cylinders prior to your purchase.** Should you be making arrangements or picking up the cylinders or cylinder packs yourself, confirm with our Customer Service Centre the requirements for the transportation and handling of goods being collected prior to making collection.
- **DO transport cylinders properly secured and in an upright position.** Cylinders and cylinder packs are heavy and need to be properly loaded and secured prior to despatch to prevent them working loose and becoming a hazard to other vehicles sharing the road.
- **DO transport cylinders in an open vehicle.** BOC does not condone transport of acetylene cylinders in closed vehicles. There have been several violent vehicle explosions as a result of transporting acetylene cylinders in closed vehicles. Fatalities have resulted.
- If no other option exists and you must transport the cylinders in a van or car, then ensure that the cylinders have been thoroughly leak checked and ensure the vehicle is well ventilated. It is recommended no more than 10kg be transported.
- Make sure the cylinder storage area of the vehicle is properly ventilated at all times. Windows or sides must be kept partly open to ensure good cross flow of air. Secure the cylinder.
- **DO NOT transport cylinders with regulators or equipment attached** even if the cylinder valves are closed.
- **DO remove the cylinders from the vehicle immediately upon arrival** at the destination.
- **DO check cylinders have not been tampered with.** Full cylinders are supplied with caps/plugs and in some cases the valve is encapsulated in a tamper evident shrink wrap film. If these are missing, exchange the cylinder for a properly labelled and capped/plugged cylinder.

27.16.7 Handling – General Safety

Handling gas cylinders — general safety

- **DO** use mechanical aids (ramps, trolleys, forklifts, scissor lifts) in preference to direct manual handling of cylinders.
- **DO** remove any connected equipment (e.g. regulator) AND refit any supplied valve protection cap and/or valve outlet gas tight cap/plug prior to moving cylinders.
- **DO** ensure cylinders are positively secured to mechanical lifting/handling devices prior to movement.
- **DO** familiarise yourself with and observe appropriate safe lifting techniques/postures prior to manually handling heavy or large gas cylinders.
- **DO** assess the load weight and dimensions before attempting any lift.
- **DO** use suitable personal protective equipment (PPE) – wear safety footwear and leather gloves to protect against falling/slipping cylinders crushing hands or feet during moving.
- **DO** ensure a positive hand grip prior to commencing a manual lift.
- **DO** ensure that loads are equally shared when attempting two-person lifts.
- **DO** note environmental conditions prior to handling cylinders – wet, hot or cold cylinders may diminish the quality of hand grip and footing may be compromised.
- **DO NOT** bear-hug cylinders to effect a lift.
- **DO NOT** lift or lower cylinders where the operators hands are above shoulder height or below mid-thigh height.
- **DO NOT** edge-roll cylinders up or down steps of 250 mm or higher.
- **DO NOT** edge-roll cylinders over discontinuous or soft surfaces.
- **DO NOT** attempt to catch or restrain a falling cylinder.
- **DO NOT** attempt to handle cylinders if you are fatigued, physically compromised or under the adverse influence of medication or alcohol.
- **DO NOT** drop cylinders as a method of transfer – this may seriously damage the cylinder or its valve, resulting in their failure and product release.

Recommendation under Manual Handling Gas Cylinder, as endorsed by ANZIGA (Australia and New Zealand Industrial Gas Association).

27.16.8 Storage

Storage locations

- **Small** quantities of cylinders may be stored in a variety of locations, provided Dangerous Goods and local government regulations and the principles given in the following paragraphs are followed.
- **Larger** quantities of cylinders should be kept in a purpose-designed store or storage area, following the same principles.

Ideal storage

Full or empty compressed gas cylinders should be stored

- in a well ventilated area,
- preferably in the open,
- with some weather protection.

The area on which cylinders are stored must be well-drained to prevent corrosion of cylinder bases. The location must be free from the risk of fire and well away from sources of heat or ignition.

Store cylinders standing vertically and secure them

1. It is recommended to store cylinders vertically.
2. Vertically stored cylinders must always be secured or under your direct control. When standing or rotating and 'walking' cylinders about their vertical axis, be aware of the hazards of uneven sloping, slippery and unstable surfaces as well as loose surfaces. Secure cylinders to prevent them falling as unsecured cylinders are a potential hazard to users and passers-by should they inadvertently bump them.
3. Acetylene and LPG must never be stacked horizontally in storage or in use.
4. Whenever possible use a cylinder trolley for transporting cylinders higher than one's waist height.

Plan for emergencies

Ensure free and clear access to cylinder storage areas

All persons with a responsibility for storage or use of gas cylinders must be familiar with the emergency procedures. Store layouts and emergency procedures need to be structured accordingly and to cater for such possible incidents.

Cylinders should be stored in dedicated cylinder-only areas

You must not store any other products in a cylinder store, particularly oil, paint or corrosive liquids.

Rotate your stock

Your storage arrangements should ensure adequate turn around of stock. Do not store empty cylinders longer than necessary; return them to BOC as soon as possible. This applies particularly to cylinders which normally contain flammable or toxic gases.

Wear the correct Personal Protective Equipment (PPE)

All persons handling gas cylinders must wear the correct PPE. Safety shoes, safety glasses plus ear protection are essential. The correct grade of gloves (where appropriate) may also be required.

In many places, safety signs will designate where and what PPE is to be worn. Loose clothing and hair is an entanglement hazard, and steps must be taken to avoid this.

Storage and segregation of cylinders

Within the storage area, oxidising gases such as oxygen must be stored at least 3 metres away from fuel gas cylinders (refer to pg 8 for types). The use of an appropriately fire rated wall may provide the required separation.

Full cylinders must be stored separately from the empty cylinders, and cylinders of different gases whether full or empty must be segregated from each other.

Where security is an issue, there is available a wide variety of Gas Cylinder Storage Systems which satisfy the cylinder storage requirements of AS 4332.

Contact BOC on 131 262 for details.

Storage of toxic gases

Toxic gases must be stored separately from all other gases and the detailed instructions on the individual BOC Material Safety Data Sheets (MSDS) must be followed.

It is essential that when handling or storing cylinders containing toxic gases that the cylinder valve outlet threaded plug or cap is always replaced in the valve outlet when the cylinder is not in use or connected to a manifold or regulator. The cylinder valve outlet threaded plug or cap acts as a secondary valve to the valve itself and provides increased safety against leakage.

In an emergency involving toxic gas or other BOC Special Gases product, contact BOC Emergency Assistance on 1800 653 572.

For full details of local storage requirements consult the State Dangerous Goods regulations, and AS 4332.

Storing your cylinders safely

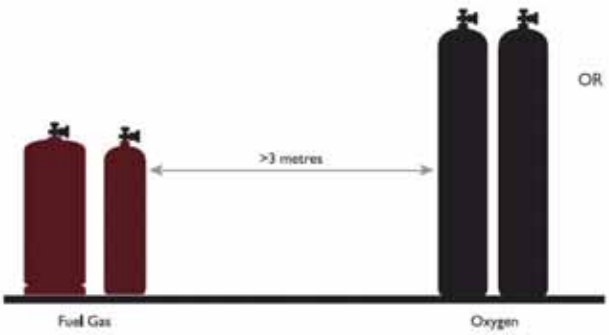
All cylinders should be considered and treated as full, regardless of their content. This means:

- Keep cylinders away from artificial heat sources (e.g. flames or heaters).
- Do not store cylinders near combustible materials or flammable liquids.
- Keep flammable gases away from sources of ignition.
- Keep cylinders in well drained areas, out of water pools or ponds.
- The storage area should be kept well ventilated and clean at all times.
- Do not store in confined spaces.
- Avoid below-ground storage where possible. Where impractical, consider enclosed space risks.
- There should be good access to the storage area for delivery vehicles. The ground surface should be reasonably level and firm (preferably concrete).
- The storage area should be designed to prevent unauthorised entry, to protect untrained people from hazards and to guard cylinders from theft.
- Different types of gases must be stored separately, in accordance with State Dangerous Goods legislation (Hazardous Substances Legislation in NZ). Also refer to AS 4332 (The Storage and Handling of Gases in Cylinders).
- Stores must clearly show signage in accordance with state Dangerous Goods regulations. This includes Class Diamonds; HAZCHEM; no smoking and naked flame warning signs.
- Full and empty cylinders should be kept separate.
- Toxic and corrosive gases should be stored separately, away from all other gases.
- Liquefied flammable cylinders must be stored upright, to keep the safety devices in the vapour phase, on a firm, level floor (ideally concrete). This is also preferable for most other gas cylinders.
- Store cylinders away from heavy traffic and emergency exits.
- Rotate stock of full cylinders, and use cylinders on a 'first in, first out' basis.
- Never repaint or obscure a cylinder label, even if the cylinder is rusty, dirty or damaged. This can result in unsafe situations.
- Never apply any unauthorised labels or markings to cylinders, unless advised by BOC to identify faulty cylinders.
- Avoid storing cylinders below 0°C. Some mixtures may separate below this temperature.
- Regularly check for leaks and faults, only with approved leak detection fluid.
- Keep ammonia-based leak detection solutions, oil and grease away from cylinders and valves.
- Never use force when opening or closing valves.

Storage of fuel gases

Within the storage area, oxygen should be stored at least 3 metres from fuel gases cylinders. The use of a fire wall may provide the required separation. If volume is greater than 200 m³ a separation distance of 5 metres needs to be executed.

Note: wall must be a minimum of one metre higher than the tallest cylinder.



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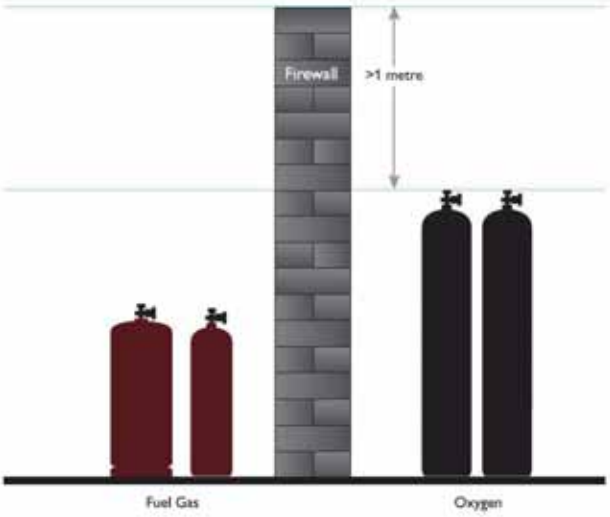


Most accidents are avoidable

The majority of accidents involving compressed gas cylinders are avoidable with increased training and awareness of safety issues.

Cylinders need to be kept cool

Do not store cylinders at temperatures greater than 65°C.

All efforts should be made to keep the cylinders well below the maximum ambient air temperature. Under extreme temperatures every effort should be made to keep the cylinders in the shade.

Excessive heat – results in an increase in internal pressure.

Excessive heat can reduce the strength of the cylinder resulting in localised bulging at the source of the heat and in extreme cases cylinder rupture. Care must be taken with an oxy-fuel gas torch when in use. **DO NOT** allow the flame from an oxy-fuel gas torch or other appliance to point onto cylinders.

The plastic Test Date Tags (TDTs) fitted by BOC on the cylinder valve inlet connection distort or melt at a predetermined temperature as shown when heat affected. This is to alert BOC gas cylinder re-fillers (and customers) of any heat damage to the cylinder. Any such heat affected cylinders are sent to our cylinder test shops to check if the cylinder can be returned back into gas service or be scrapped.

Before *After*

Heat indicator test date tags (view from tag underside – without markings)

Handle cylinders carefully

Damage – take care in handling cylinders to avoid impact damage. Do not drop cylinders off vehicles or docks when unloading or allow heavy objects to fall on them.

Impact damage can potentially reduce the cylinder wall thickness, which could lead to premature cylinder rupture.

Barcodes – are to alert the fillers and operators when the cylinders are due for re-test, and for identification purposes.

DO NOT under any circumstances tamper with or remove these.

Keep cylinders away from electric welding tools, red-hot metals, furnaces or any heat sources

Keep electrical welding equipment well away from cylinders. Do not allow welding torches to contact or get near to cylinders.

An accidental arc between the tool and the cylinder could cause localised overheating of the cylinder wall and thereby weaken the cylinder.

Anything hot must be kept away from cylinders.

Take care not to allow welding and cutting sparks, flames or red hot slag to make contact with the exterior of cylinders, or their associated cutting equipment and/or hoses. Keep cylinders a safe distance from potential accidental spillages of molten metal.

If any of these hot items reach an acetylene cylinder, it will melt the fusible plugs and cause a release of acetylene gas and fire from the cylinder.

DO NOT

- put any cylinders adjacent to a furnace;
- put LPG cylinders near boilers or heaters;
- use cylinders whether full or empty as any kind of support structure.

27.16.8 Use and Equipment

Use of gas cylinders and associated equipment

Safe connection of equipment

Cylinder valve operation

Use care when opening cylinder valves. Slowly open (anticlockwise) the cylinder valve using the hand wheel or (in a small number of cases) the cylinder valve key (obtainable from BOC Gas and Gear centres)

N.B. Soft seat, spindle key operated cylinder valves should not be subjected to excessive torque. Use the correct spindle key and only use moderate hand torque.

An opened valve should never be left against the backstop (i.e. fully opened until resistance is encountered), but should be turned back at least half a turn to avoid seizure in an open position. This can occur if the valve is left open for long periods of time.

When you shut the valve turn it clockwise and just enough to stop the gas completely. Never wrench it closed.

Remember **all** cylinder valves are closed by turning the hand wheel in a clockwise direction. If you are going to stop work for a while (e.g. morning tea break, etc.) then close the cylinder valve.

Acetylene cylinders are to be used standing vertically on their base

Acetylene cylinders are transported standing vertically and are designed to be used in an upright position. For this reason, always store and leave these cylinders standing vertically.

Should acetylene cylinders have been stored or transported horizontally, place the cylinders in a vertical position and allow 4 hours before use.

For the few cylinders now still fitted with cylinder valve keys, only use the recommended cylinder valve keys.

- NEVER increase the leverage of keys by fitting handle extensions.
- NEVER use spanners with long handles.
- NEVER use badly worn cylinder valve keys.

Any of the above will damage the square end of the spindle or the valve's soft plastic (usually Nylon) seat.

If the valve spindle is too stiff to open by hand with the cylinder key, return the cylinder for exchange.

Sheared valve keys

N.B. Most cylinders are now supplied with hand wheels so this will be a rarity.

If you believe your cylinder valve has a broken or damaged spindle, (e.g. the cylinder valve key rotates without the valve opening) do not persevere any further. Tag the cylinder valve as defective and add the date, plus a contact phone number, and call BOC on 131 262 for a replacement cylinder.

Only use equipment that is fit for purpose

The gas cylinder and outlet valve are designed to supply gas through pressure regulators that meet the requirements of the relevant Australian Standards.

Pressure regulators thread directly to the cylinder valve outlet (also applies to cylinder packs) so it is vital that the size and tolerance are to specification and meet the specified machining tolerance.

Never install additional piping or fittings between regulators and the outlet valves of cylinder packs.

When individual cylinders of the same gas are manifolded together to a common outlet, the pressure regulator must be connected to this single manifolded outlet.

Use the adjustment valves downstream of the pressure regulator only and not those fitted upstream, as this will starve the regulator of flow.

Pressure regulators: check the inlet spigot connection first

Make sure the pressure regulator is designed for use with high pressure gas cylinders and that the inlet spigot thread matches the cylinder valve outlet and that the O-ring or seal is in place, clean and undamaged.

Never force any regulator connection that does not fit. Regulator connections can be fully threaded in by hand and then only require a fraction of a turn to achieve a gas tight seal. Regulators must be maintained in accordance with the manufacturer's instructions.

Do not attempt to repair or modify the regulator. Take it to the manufacturer's authorised service centre.

Release (i.e. turn anti-clockwise, "back off") **the regulator adjusting knob before attaching the pressure regulator.**

Before connecting a pressure regulator to a full cylinder always screw out (anticlockwise) the pressure adjusting knob so that there can be no flow through the regulator when the cylinder valve is initially opened.

Only use the gas for the intended purpose.

Gas cylinders with their associated regulator and reticulation equipment are supplied for use in their intended application.

These uses are covered in gas supplier catalogues.

Do not experiment with gas or gases. If in doubt and expert assistance is required then please consult with our Technical Service desk on 131 262.

1	Outlet or Regulated Pressure Gauge	
2	Inlet or Cylinder Pressure Gauge	
3	Regulator Outlet Connection	
4	Inlet Spigot (regulator)	
5	Cylinder Valve	
6	Regulator Control Knob	Increase Pressure (Turn Clockwise)
		Decrease Pressure (Turn Anti-clockwise)

27.16.9 PPE

Choosing safe equipment

Pressure regulator: be guided by the gas supplier

Where a pressure regulator is fitted with gauges (content and delivery pressure), these should never be removed, exchanged or tampered with in any way. Replacement gauges are available from your local BOC branch and should only be fitted using oxygen safe tape.

Hoses: use the right colour and the right quality

Only use hose that conforms to the relevant Australian Standard (AS 1335 for oxygen, acetylene and LPG hose used for welding, and AS 1896C for LPG hose for industrial applications). Hoses should be colour coded in accordance to the same standards.

Colour coding for hoses

Gas	Colour
Oxygen	Blue
Acetylene	Red
LPG	Orange

Never use LPG hose for acetylene, never use water hose.

Hoses: use the right end connection

BOC twin hose is supplied with the correct threaded connections (left handed for fuel and right handed for oxygen) to fit either the pressure regulators or flashback arrestors.

Hose connections must conform to the Pressure and Tensile requirements as laid down in AS 1335 and AS/NZS 1869 for LPG.

Incorrect hose connections are a frequent cause of accidents. Check connections regularly.

Remember to purge hoses and check for leaks and visible signs of damage before lighting a cutting or welding torch.

Flashback arrestors

A flashback is a flame, travelling at supersonic speed, in the opposite direction to normal gasflow in oxy-fuel gas equipment. The use of flashback arrestors is required to limit the potential damage that may result if a flashback occurs. If not stopped, a flashback can melt the equipment which, in the worst case, could explode and travel back to the cylinder.

BOC flashback arrestors have a sensitive non-return valve that stops the gasflow and a fine sintered filter that quenches the flame. On the BOC regulator end of the flashback arrestor, a thermal cut-off valve is built in. This valve will stop the flow of gas before ignition upstream occurs.

To ensure total safety and protection from the causes and effects of flashbacks, BOC flashback arrestors should be fitted to each gas line, as the risk of a reverse flow of gas exists with both oxygen and fuel gas. According to AS 4839 flashback arrestors should be tested every year.

Do not use longer hoses than necessary

For fixed installations according to AS 4289.

For safety purposes, hoses shall be installed as follows:

a) Protected from heat, mechanical damage, traffic sparks, slag, and oil or grease. They shall be as short as possible. Where longer lengths are needed, extension hoses, coupled by means of hose connectors suitable for use with oxygen and acetylene, may be used, but only occasionally.

b) Copper pipe shall not be used to couple hoses carrying acetylene.

For portable equipment according to AS 4839:

a) The maximum hose length shall be fifteen (15) metres for each gas, or such a distance which will allow the operator of hand-held equipment to be in sight of all supply cylinders, whichever is the smaller. Hoses shall be single length.

Do not use hoses that appear worn

Hoses showing signs of deterioration shall be scrapped.

Use correct Personal Protective Equipment (PPE)

When welding or cutting use goggles with double lenses to protect your eyes against glare and mechanical impact from flying fragments. The inner lens should be tinted and the outer lens clear. The clear outer lenses should be changed regularly when spatter builds up.

It is also advisable to wear eye protection (spectacles or goggles) when handling high pressure gases to protect the eyes against flying dust particles in the gas stream.

Do not wear clothes made of highly combustible materials. Leather gloves or gauntlets should be used when necessary. In awkward work locations additional protective clothing may be required. Recognise the hazards of backflow and take suitable precautions.

Safety hazards can be created if contaminants are allowed to pass back into the cylinder. Precautions must be taken to ensure that when the cylinder is in use no backfeeding of gas or liquid can occur. As soon as the gas in the cylinder has been used, close the cylinder valve to avoid moisture and other contaminants entering the cylinder.

27.16.10 Emergency

In all emergencies, phone Emergency Services on 000, and always use protective clothing and equipment

Gas cylinders in fires

Actions to be taken when fire is discovered

Gas cylinders involved in a fire may explode.
If cylinders are in a fire the key actions to be taken are:

- Evacuate the area (min. 100 m).
- Call the fire brigade.
- Advise persons between 100–300 m from the cylinder to take cover.
- If you attempt to fight the fire, do so from a protected position such as behind heavy machinery or a solid wall using copious quantities of water. Otherwise keep away, do not approach or attempt to move the cylinder, do not attempt to open the valve.
- When the fire brigade arrives inform them of the location and number of gas cylinders directly involved in the fire, and the names of the gases they contain.
- Cylinders which are not directly involved in the fire and which have not become heated should be moved as quickly as possible to a safe place – provided this can be done without undue risk. Make sure these cylinder valves are closed.
- As soon as possible inform your local BOC branch of the incident.
- Do not use cylinders that have been exposed to a fire until BOC has examined them.

Remember that even after the fire has been extinguished some cylinders which have been heated can explode, particularly acetylene cylinders.

Cylinders exposed to a heat source

Cylinders which have been exposed to excessive heat – such as fire or by accidental impingement of a flame – may fail when next filled and may result in an operator's death.

ALWAYS clearly mark fire exposed cylinders and advise BOC.

Under no circumstances should you clean or repair the cylinder!

Do not use any fire damaged cylinders

Leaking cylinders

Leaking cylinders may lead to fire or explosion when it meets an ignition source.

Do not enter an atmosphere which may contain a flammable gas/vapour and air mixture in the flammable range without either:

a) testing that the flammable gas/vapour content is less than 20% of the Lower Explosion Limit (LEL) or

b) ventilating prior to entry to achieve (a).

(Do not use electrical fans etc. to ventilate unless flameproof.)

Leaking acetylene cylinders

1. Where an ignition has not occurred.

Try to stop the leak by closing the cylinder valve. If the leak cannot be stopped then as long as

a) there is no ignition of the escaping gas, and

b) the cylinder is not becoming hot

then to prevent ignition and resulting harm to people and/or property, take the following actions:

- Avoid any source of ignition.
- Evacuate uninvolved personnel from the area.

- If safe to do so, remove cylinder outside to a well ventilated area, carefully avoiding shocks, bumps, and ignition sources and staying out of the path of escaping gas in case it ignites.
- Inform your BOC depot.
- Ensure the work area is thoroughly ventilated before re-entry.
- Hot acetylene cylinders must be dealt with as set out in the paragraph 'Gas Cylinders In Fires'.
- If the leak has ignited then follow the recommendations below:

2. Where an ignition has occurred

Only when it can be done immediately after ignition, close the cylinder valve to stop the gas flow. Feel the cylinder shell with bare hands for any rise in temperature.

If

- The cylinder becomes hot
- The flame or gas flow does not stop
- There is any doubt or other reason

Then

- Evacuate the area 200 m direct line of view of the cylinders.
- From a protected position spray water on the cylinder to keep it cool and continue the water spray until the fire brigade arrives.
- Eliminate all other sources of ignition.
- Inform BOC on the Emergency Response line 1800 653 572.

A flame from an acetylene cylinder which is in a room and whose valve cannot be closed shall normally be left to burn while cooling the cylinder with water. If the flame is extinguished, the acetylene continues to escape and can re-ignite and result in/cause a fire or explosion. The flame may only be extinguished if:

- It can give rise to a dangerous situation. In such a case, apply the relevant recommendations in 2 above and ventilate abundantly and naturally.
- The acetylene flow is very small and the acetylene cylinder can be safely and quickly carried out in the open air, in a safe place.

Ensure working area is well ventilated before re-use. In all other circumstances, keep the cylinder cool until the fire brigade arrives.

Even once the fire has been extinguished, dissolved acetylene cylinders need to be cooled for a total of 24 hours.

BOC will arrange for collection of the cylinder after the 24 hour cooling period.

Leaking LPG Cylinders

1. Where an ignition has not occurred

If a leak has occurred but not ignited, which cannot be stopped by closing the valve, do not attempt to tighten the cylinder valve in the body or tamper with safety devices, but take the following actions immediately:

- Call the fire brigade.
- Eliminate all sources of ignition.
- Evacuate the area.
- Remove the cylinder to a safe position outside, at least 100m direct line view of the cylinders. If possible keep the leak facing up. Keep away from drains.
- Warn everyone in the area of the gas leak giving priority to those downwind and downhill.

2. Where an ignition has occurred

- Call the fire brigade.
- If the valve is accessible and it is safe to do so, attempt to close the valve.
- If the flame from the cylinder has started a secondary fire which is heating the cylinder, evacuate the area 100 m around the cylinder.
- If possible cool the cylinder with a water spray from a protected position.

Leaking hydrogen cylinders

CARE! Hydrogen burns with an almost invisible flame. Burning hydrogen can be detected by the feel of heat, looking for signs of heat shimmer in the air and falling droplets of water.

1. If a leak has occurred but not ignited, which cannot be stopped by closing the valve, do not attempt to tighten the cylinder valve in the body, but take the following actions:

- Eliminate all sources of ignition.
- Remove to a safe position outside.
- Inform BOC depot.
- Ensure the work area is thoroughly ventilated before re-use, particularly at high level.

2. If the leak has ignited:

- Call the fire brigade.
- If the valve is accessible and it is safe to do so attempt to close the valve (take care as a hydrogen flame is almost invisible).
- If the flame from the cylinder has started a secondary fire take key actions as set out in the paragraph headed 'Gas Cylinders in Fires' on previous page.

Leaking toxic gases – ammonia

The odour of ammonia is very characteristic and quite recognisable providing adequate warning of its presence.

Ammonia is a primary irritant which is severely irritating to the skin and to the mucous membranes of the eyes, nose, throat and lungs. Ammonia is flammable in air only at comparatively high concentrations (15-28% by volume in air). These limits are seldom encountered in practical handling.

Do not enter an atmosphere which may contain toxic gas without either:

a) testing that no toxic gases are present, or

b) wearing Self Contained Breathing Apparatus (SCBA).

The precautions to be taken with toxic gases are the following:

- Leak-check systems by pressurising with inert gas before admitting toxic gas, and using leak detection solution on joints.
- Provide good local ventilation or mechanical extraction.
- Use a gas-specific leak detection method.
- Install atmospheric monitoring and alarm (this may be mandatory by legislation).

- Assure breathing quality air for:
  - Normal operations
  - Emergencies
- Have on hand:
  - MSDS
  - Emergency equipment
  - Specific operating and emergency procedures

Leaking asphyxiant gases

Gases which create a hazard by displacing oxygen are called simple asphyxiants.

Poisonous gases are hazardous at parts per million in the atmosphere. Flammable gases enter the flammable range at a few percent in the atmosphere. However, any gas whether poisonous, flammable, non-flammable, toxic or non-toxic can create an additional hazard if its concentration lowers the oxygen concentration to 19% or less.

Risk of altered gas concentrations

Because gases are stored under pressure, gases leaking out of the storage container into the working atmosphere may displace other gases in the atmosphere, upsetting the normal balance.

Do not enter an atmosphere which may be deficient in oxygen without either:

a) testing the oxygen content is normal (19–23%), or

b) wearing Self Contained Breathing Apparatus (SCBA)

Asphyxiation can cause death in seconds if the oxygen content is 0%, or minutes if it is less than 19%.

Generally there are no warning signs that an atmosphere contains increased concentrations of other gases and a deficiency of oxygen.

Any enclosed area in which gases are being stored, piped, used or vented may become deficient in oxygen.

In addition, because many gases are heavier than air, and collect in pits and drains, even small hatchways and coverings may contain oxygen deficient atmospheres.

Do not enter these areas without appropriate Self-Contained Breathing Apparatus & Life Line.

Leaking oxidising gases

Because oxygen is very reactive, almost everything will react with it given the right conditions of heat and pressure.

Oxygen at high pressures in cylinders and pipework poses an extra hazard.

Do not enter an atmosphere which may be enriched with oxygen without:

a) testing the oxygen content is normal (19–23%),

b) dampening clothing, and

c) avoiding sources of heat and ignition.

Poor system design can lead to hazards when using oxygen.

Contaminants

Oxygen systems made up of "oxygen compatible" components can also be contaminated with non-compatible materials. Oil, dust, and grit are examples of contaminants that burn readily or provide a source of ignition in such systems.

Sources of contamination

Contamination in an oxygen system can come from two sources:

- from poor cleaning of the system at the time of assembly
- from contamination introduced during its service life, either by wear of components or through incorrect maintenance procedures.

Contamination can be ignited

Contamination that is not removed from the system can be easily ignited and can promote fires of other materials. If the fire is extensive it may rupture the system.

Flashback to an acetylene cylinder

A flashback is the return of flame through the blowpipe or even the regulators. It may also reach the acetylene cylinder causing heating and explosive decomposition of the contents; it can be caused by faults in the equipment and/or poor procedure. In most cases a flashback does not travel beyond the cylinder neck.

You may be able to identify a flashback has occurred by:

- An audible 'pop' or muffled gunshot sound.
- Hot spot on the cylinder.

If a flashback occurs take the following actions, if safe to do so:

- Close both blowpipe valves – oxygen first.
- Close both cylinder valves.
- Check the acetylene cylinder shell with the bare hand for a rise in temperature (if hot or glowing, evacuate area immediately and take actions as per 'Gas Cylinders in Fires' on page 368.)

If the temperature of the acetylene cylinder shell rises, treat the cylinder as if it had been involved in a fire – see 'Gas Cylinders in Fires'.

- If the temperature of the acetylene cylinder shell does not rise, unwind pressure adjustment screw on each pressure regulator.
- Check that the nozzle is not damaged and that it is tight.
- If the blowpipe is overheated, plunge it into cold water.
- Carry out the start procedure as recommended by the equipment supplier.
- If the flashback recurs immediately, the blowpipe/nozzle may be faulty and should not be used again. Again check if cylinder is heating (refer to the paragraph headed 'Gas Cylinders in Fires' and contact BOC).

Frozen regulators or valves

Thaw with warm water, never by flame. This condition may be caused by excessive flow rates. Contact BOC.

Frosted cylinders

This condition is usually due to excessive draw-off rate and can be overcome by seeking expert advice on manifolding cylinders – do not attempt to heat the cylinders.

27.17 Hand Tools

- It is essential to use the right tools for the job
- Regular maintenance and repair of all hand and portable power tools is a must to prevent accidents. Good tool maintenance serves two purposes, firstly proper repair of tools that become worn and dull make the work easier and, secondly, it ensures the scrapping of defective tools
- Tools found to be defective should be reported and replaced immediately
- Workers must not carry knives or sharp tools in their clothes pockets. If the work requires such tools they should be carried in a strong tool belt fitted with pouches deep enough to secure such tools safely. Cutting edges and sharp points should always be placed downwards inside the pouch
- When needed at elevated work places, tools should be pulled up and lowered with a rope. When working overhead on scaffolds, tools must be kept in tool bags or boxes to prevent them from falling and injuring others below
- When work takes place on, or near, electrical apparatus only properly insulated and non-conductive tools are to be used. Insulation should be tested at regular intervals by a competent electrician
- In work places near inflammable materials or explosives only tools made from non-ferrous metals should be used. A spark struck from normal steel tools could cause a fire or explosion. Spark proof tools should be inspected regularly in case steel splinters have become embedded and need grinding out to ensure safe usage

27.17.1 Portable Power Tools

- When using portable power tools it is most important that they are used only by workers trained in their correct use and on work for which the tools were designed. It is the responsibility of managers and supervisors to provide the right kind of tool for the job and to see that it is properly used.
- Safety glasses or face shields should be worn where chips or dust may fly or where tools may break. Personnel operating drills, saws or grinders should not wear gloves, ties or loose clothing or anything that might catch in the equipment being used.
- Workers on elevated platforms with portable power tools should wear a safety belt to protect against a fall or serious injury.
- Ensure the trigger switch is in the OFF POSITION before
- Putting the tool down;
- Connecting the power to the tool.
- Before servicing the tool DISCONNECT THE POWER SUPPLY.
- Plugs and sockets must be connected properly and maintained regularly by a competent electrician.
- Regularly check equipment for defects particularly the guard and electric lead.

27.18 Hazardous Substances

The COP for Managing risks of hazardous chemicals in the workplace and the Regulations define a, a hazardous chemical is any substance, mixture or article that satisfies the criteria ofone or more *Globally Harmonised System of Classification and Labelling of Chemicals* (GHS) hazard classes, including a classification in Schedule 6 of the WHS Regulations.

However, some hazard classes and categories of the GHS are excluded by the WHS Regulations. Most substances and mixtures that are dangerous goods under the ADG Code are hazardous chemicals, except those that have only radioactive hazards (class 7 dangerous goods), infectious substances (division 6.2) and most class 9 (miscellaneous) dangerous goods.

Refer - SWM WC-S14

Hazardous substances are chemicals and other substances (solids, liquids or gases) that are toxic, corrosive, flammable or otherwise dangerous, causing illness or disease by entering the body by:

- Breathing in the substance (inhalation)
- Absorption through the skin (dermal absorption)
- Ingestion (accidental swallowing or smoking with contaminated hands)

Harm can occur suddenly e.g. dizziness, nausea, irritation or may onset gradually over time e.g. cancer or dermatitis. Some people are more susceptible to harm than others.

27.18.1 Responsibilities

27.18.2 Council

Council has a duty to obtain SDS from suppliers of all hazardous substances in use in the workplace. The COP for Preparing, Reviewing and Amending SDS state that they must:

- be in English
- contain unit measures expressed in Australian legal units of measurement under the *National Measurement Act 1960* (Commonwealth)
- state the date it was last reviewed, or if it has not been reviewed, the date it was prepared
- state the name, Australian address and business telephone number of the manufacturer or importer
- state an Australian business telephone number from which information about the chemical can be obtained in an emergency.

The language used in an SDS should be simple, clear and precise, avoiding jargon, acronyms and abbreviations. Vague and misleading expressions should not be used. Phrases such as “may be dangerous”, “no health effects”, “safe under most conditions of use” and “harmless” are also not recommended. It may be that information on certain properties is of no significance or that it is technically impossible to provide detailed information, and if so, the reasons for this should be clearly stated under each heading. If it is stated that a particular hazard does not exist, the safety data sheet should clearly differentiate between cases where no information is available to the classifier and cases where negative test results are available.

Other units of measurement, including the International System of Units (SI) or non-SI units may be used if they are in wide use in Australia. For example, mm Hg for vapour pressure or degrees Celsius (°C) rather than Kelvin (K) for temperature can be used.

An SDS should include a version number, superseded date or some other indication of what version is replaced.

There is no limit in relation to the length of the document, but it should be proportionate to the hazard level of the chemical and the available information.

All pages of an SDS should be numbered and include an indication of the end of the SDS, for example, "Page 1 of 3". Alternatively, number each page and indicate whether there is a page following, for example, "Continued on next page" or "End of SDS".

27.18.3 Supervisors & Workers

Supervisors are responsible for ensuring tasks are carried out according to procedures. **Workers** are responsible for carrying out all activities in a safe manner in accordance with procedures and training undertaken. Safety procedures include:

- Workers should consult with staff about use and control
- Review the possibility of substitution of less hazardous substances
- Ensure correct identification of any unknown substance
- Take note of HAZCHEM symbols and warning signs
- Store cylinders containing flammable, toxic or reactive chemicals in separate areas
- Limit access to hazardous areas
- Use ventilation to extract fumes
- Wear PPE provided
- Observe SOPs and other safe work practices
- No eating, drinking or smoking around a hazardous substance or leaving food nearby
- Washing hands and face with soap and hot water before eating or drinking
- Consider a risk assessment for work activities

27.18.4 Asbestos

When dealing with Asbestos the COP How to Manage and Control Asbestos in the Workplace should be referred to including the current Act and Regulations.

Managing the risks associated with asbestos involves:

- Identifying asbestos and ACM at the workplace and recording this in the asbestos register
- Assessing the risk of exposure to airborne asbestos
- Eliminating or minimising the risks by implementing control measures
- Reviewing control measures to ensure they are effective
- When choosing the most appropriate control measure, the following hierarchy of controls must be considered:
    - eliminating the risk (for example, removing the asbestos)
    - substituting the risk, isolating the risk or applying engineering controls (for example, enclosing, encapsulation, sealing or using certain tools)
    - using administrative controls (for example, safe work practices)
    - using PPE.

A combination of these controls may be required in order to adequately manage and control asbestos or ACM.

When undertaking asbestos-related work activities, the WHS Regulations require that it only be performed in accordance with the following requirements:

- Any worker undertaking asbestos-related work must be informed of the health risks of exposure to asbestos and that they will need to undergo health monitoring. Further information can be found in *Health monitoring for exposure to hazardous chemicals – Guide for persons conducting a business or undertaking.*
- A competent person carries out air monitoring of the work area where asbestos-related work is being carried out if there is uncertainty as to whether the exposure standard is likely to be exceeded
  - Any asbestos that may be encountered by workers undertaking asbestos-related work must be identified, and if it is not possible to identify, it must be assumed asbestos is present
  - The area in which asbestos-related work is undertaken is separate from the rest of the workplace, so far as is possible
  - The asbestos work area must be signed and barricaded to ensure that other workers do not enter the area
  - Facilities must be provided to allow for the decontamination of workers, equipment and the items worked upon
  - Anything removed from the work area must decontaminated before it is removed from the work area
  - If material contaminated with asbestos is to be removed from the work area, it must be sealed within a container, which is decontaminated and labelled to indicate the presence of the asbestos and disposed of at a licensed disposal facility as soon as is practicable
  - If personal protective equipment used in asbestos-related work is to be removed from the work area for disposal, it also must be sealed within a container, which is decontaminated and labelled to indicate the presence of the asbestos in accordance with the WHS Regulations and disposed of at a licensed waste facility as soon as reasonably practicable.

WORKING WITH ASBESTOS IS DANGEROUS AND SHOULD ONLY BE CARRIED OUT BY QUALIFIED OPERATORS HOLDING ONE OF THE BELOW LICENCE'S:

A **Class A asbestos removal licence** allows a licence holder to remove friable asbestos and non-friable asbestos and asbestos contaminated dust (ACD).

A **Class B asbestos removal licence** allows a licence holder to remove non-friable asbestos and ACD associated with the removal of non-friable asbestos.

27.19 Housework

All Council work areas should be maintained in a clean, orderly and organised way. Work area inspection should include the state of the work area. It is essential that plant or equipment that requires *isolation* before cleaning or maintenance is disconnected and/or moved to a safe cleaning area. Rubbish is a hazard and should be removed regularly. Substances hazardous to health or the environment should be safely and securely stored.

Staff should be aware of:

- Protrusions from racks, desks, benches
- Unsafe stacking
- Cluttered isles
- Overloading
- Obstructed light switches, drains and alarms

Safety procedures include:

- Storing tools, equipment and PPE properly
- Storing items upright, using bins, racks and pallets
- Placing heavier items on lower shelves
- Following manufacturer's storage instructions
- Planning systems and/or tasks

Work area general inspections should include:

- Illumination – lighting in the workplace
- Room temperature and ventilation
- Floors in the work space
- Work stations and work benches
- Machinery and plant
- Noise
- PPE and clothing
- Electrical
- Hazardous substances
- Storage
- Stairs and landings
- Amenities27.20 Ladders & Working at Heights

The COP Managing the Risk of Falls at the Workplace give guidance if ladders are to be used they must be selected to suit the task to be undertaken. In doing this, you should consider the duration of the task, the physical surroundings of where the task is to be undertaken and the prevailing weather conditions.

Ladders should have a load rating of at least 120 kg and be manufactured for industrial use.

Positioning ladders: Any ladder used at a workplace must be set up on a solid and stable surface, and set up so as to prevent the ladder from slipping. Single and extension ladders can be prevented from slipping by:

- Placing ladders at a slope of 4:1, and setting up stepladders in the fully opened position
- Securing ladders at the top or bottom, or if necessary, at both ends

Refer - SWM WC-S10 – Working at Heights

27.20.1 Working at Heights

Council endeavours to ensure that all risks associated with falls from a height are controlled, by providing and maintaining the following measures:

- Stable and securely fenced work platform, or if this is not reasonably practicable
- Secure perimeter screens, fencing, handrails or other physical barriers capable of preventing the fall of a person, or is this is not reasonably practicable
- Other forms of physical restraint that are capable of arresting the fall of a person from a height of more than 2 metres, or if this is not reasonably practicable
- Provision of a safe means of movement between different levels at the place of work

Working at heights is defined as any activity undertaken where there is a risk of a person falling more than 2 metres.

- Whilst undertaking any activity which involves working at heights, workers are required to do so in a manner which does not adversely affect their own health and safety, or that of others.
- They must immediately report to the supervisor any matter which may affect their own or others' health and safety.
- Workers must wear personal protective equipment as required and ensure that they have the correct training required in order to safely gain access to, work on and exit the work area.
- Council must provide appropriate resources to monitor small works contractors' compliance with these procedures.
- The type of equipment which may be used when working at heights to minimise risk include:
  - Scaffolding
  - Fixed work platform
  - Mobile work platform
  - Safety harness, fall arrester
  - Hard hat
  - Toe boards
  - Waist high barriers
- All areas, where work is being carried out at height and there is a risk to people from falling objects, shall be as far as practicable barricaded and conspicuously marked:

"Keep Clear – Working at Heights – Beware of Falling Objects"

27.21 Lasers

Lasers are commonly used for alignment, levelling, control and survey tasks for construction work. The Regulations impose certain requirements in relation to the safe use of laser equipment at the workplace. SafeWork have produced a document in relation to Laser classifications and potential hazards and this should be adhered to when utilising lasers in the workplace.

Australian Standard AS 2397-1993 Safe use of lasers in the building and construction industry should be accessed when laser work is to be conducted at Council.

27.21.1 Laser Classification and Potential Hazards

Laser classifications and potential hazards

Laser Class	Description	For use in building and construction industry
Class 1	Safe for use under all conditions of exposure.	✓
Class 2	Low-powered lasers that may require some administrative controls but present little hazard (for example, eye protection is usually provided by normal blink and aversion responses).	✓
Class 3A	These lasers emit higher levels of light and their use requires more stringent engineering and administrative precautions in order to ensure they are not used with optical instruments (for example, a builder's level or theodolite) which would concentrate the beam so that it would all enter the eye.	✓
Class 3B (Restricted)	These lasers operate at the same power levels as Class 3A but have higher levels of irradiance (power density). These lasers can be used for building or construction applications but should **not** be used in dimly lit building or construction applications (that is less than approximately 100 lux).	✓
Class 3B	These lasers emit either invisible or visible radiation potentially hazardous to the eye and skin. These lasers must not be used for building or construction tasks.	X
Class 4	These lasers are high-power devices capable of producing diffuse reflections hazardous to the eye. Skin exposure to the direct beam of a Class 4 laser is also hazardous. These lasers must **not** be used for building or construction tasks.	X

Lasers can cause damage to the eyes and skin due to exposure to high irradiances. The potential for lasers to cause biological damage depend on the following factors:

- Wavelength of radiation
- Power strength of radiant exposure
- Environmental conditions
- Individual susceptibility due to pre-existing physiological conditions

27.22 Lighting

COP – Managing the Work Environment and Facilities state that Council must ensure that sufficient lighting must be provided and the Code should be referred too when sourcing lighting, whether it is from a natural or artificial source, to allow safe movement around the workplace and to allow workers to perform their job without having to adopt awkward postures or strain their eyes to see.

The following factors should be taken into account:

- the nature of the work activity
- the nature of hazards and risks in the workplace
- the work environment
- illumination levels, including both natural and artificial light
- the transition of natural light over the day
- glare
- contrast
- reflections

Additional lighting may be needed for some types of work or at places of particular risk (such as crossing points on traffic routes). Table 1 provides guidance on the recommended illumination levels for various types of tasks, activities or interiors.

Different lighting levels may be needed for different times of the day. Too much lighting can result in glare. Measures to prevent low or excessive levels of lighting, glare or reflection include:

- providing additional lighting, such as a lamp on a movable arm
- changing the position of existing lights
- changing the location of the workstation
- increasing or decreasing the number of lights
- changing the type of lighting used e.g. from white light to blue light
- changing the diffusers or reflectors on existing lights
- using screens, visors, shields, hoods, curtains, blinds or external louvers to reduce reflections, shadows and glare

27.22.1 Recommended Illumination Levels

Table 1: Recommended illumination levels[1]

Class of task	Recommended illuminance (lux)	Characteristics of the activity/interior	Examples of types of activities/interiors
Movement and orientation	40	For little-used interiors with visual tasks limited to moving around.	Corridors; cable tunnels; indoor storage tanks; walkways.
Rough intermittent	80	For interiors used intermittently, with visual tasks limited to movement, orientation and coarse detail.	Workers change and locker rooms; live storage of bulky materials; dead storage of materials needing care; loading bays.
Normal range of tasks and workplaces			
Simple	160	Continuously occupied interior with visual tasks (coarse detail only.) Occasional reading of clearly printed documents for short periods.	Waiting rooms; entrance halls; canteens; rough checking of stock; rough bench and machine work; general fabrication of structural steel; casting concrete; automated process monitoring; turbine halls.
Ordinary or moderately easy	240	Continuously occupied interiors with moderately easy visual tasks with high contrasts or large detail.	School boards and charts; medium woodworking; food preparation; counters for transactions; computer use.
Moderately difficult	320	Areas where visual tasks are moderately difficult with moderate detail or with low contrasts.	Routine office tasks (e.g. reading, writing, typing, enquiry desks.)
	400		Inspection of medium work; fine woodwork; enquiry points; car assembly.
Difficult	600	Areas where visual tasks are difficult with small detail or with low contrast.	Drawing boards; most inspection tasks; proofreading; fine machine work; fine painting and finishing; colour matching.
Very difficult	800	Areas where visual tasks are very difficult with very small detail or with very low contrast.	Fine inspection; plant retouching; fine manufacture; grading of dark materials; colour matching of dyes.

[1] Source: AS/NZS 1680.1: 2006 – *Interior workplace lighting*

27.23 Machinery

Council will address the following issues:

- Only to be operated by workers who have adequate information, instruction and training and certification in their safe use
- Only to be used for the purpose for which it was designed
- Appropriate guards installed on machines
- As far as practicable, measure taken to prevent unauthorised interference
- Make provision for appropriate checks, tests and inspections

27.23.1 Managers

Responsible for ensuring the procedures are implemented within their workgroup. Make appropriate arrangements for repair and maintenance to ensure safe operation.

27.23.2 Supervisors

Responsible for ensuring tasks are carried out according to procedures. Supervisors must ensure workers are given information, instruction and training in safe use. Supervisors must ensure that operation in a public place does not place members of the public at risk.

27.23.3 Workers

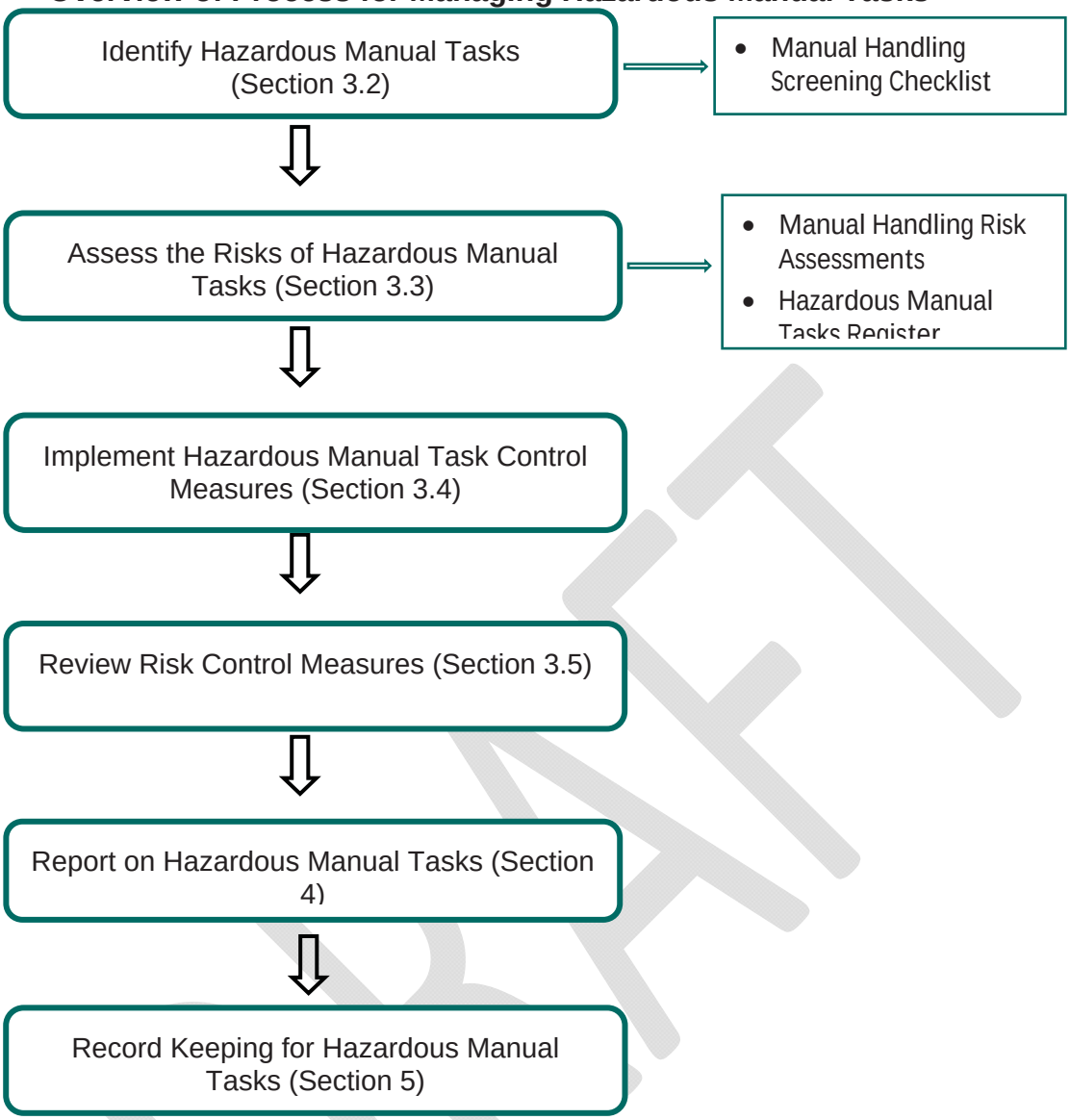
Responsible for carrying out all activities in a safe manner with regard to training provided e.g. user manuals. They are also responsible for undertaking safety checks and maintenance before commencing work. Repairs and defects to be reported by workers to supervisors immediately.

Refer - SWM WC-S02 Mobile Plant

27.24 Manual Handling

Refer - Hazardous Manual Tasks Procedure

Overview of Process for Managing Hazardous Manual Tasks



Managers and Supervisors must identify hazardous manual tasks in their areas of control. Tasks that are difficult to carry out, tiring (e.g. due to muscle fatigue), awkward or uncomfortable are likely to be hazardous manual tasks.

To identify hazardous manual tasks, Managers will review:

- Related workplace injuries and incidents
- Hazard reporting trends
- Worker concerns

Potential hazardous manual tasks can also be identified by reviewing the manual handling risk factors and examples of hazardous manual tasks The *Manual Handling Screening Checklist* can also be used to indicate if additional investigations are required.

The identified hazardous manual tasks will be reviewed by the Manager and WHS Officer to prioritise the tasks to be risk assessed.

27.25 Mobile Devices

Refer - Mobile Communications Devices Policy (Draft as at 16/01/2017) WINT/17/37

- Provide employees of Council with guidelines regarding the appropriate use of Council-supplied mobile communication devices (MCDs)
- Provide guidelines regarding the appropriate use of privately-owned MCDs while at work or while engaged in Council business
- Ensure, as far as possible, that MCDs are used in such a way as to preserve a safe travel and work environment

27.26 Noise

The COP Managing noise and preventing hearing loss at work should be referred to when controlling noise and preventing hearing loss at work and states that hazardous noise can destroy the ability to hear clearly and can also make it more difficult to hear sounds necessary for working safely, such as instructions or warning signals.
Managing the risks related to noise will assist in:

- Protecting workers from hearing loss and disabling tinnitus (ringing in the ears or head)
- Improving the conditions for communication and hearing warning sounds
- Creating a less stressful and more productive work environment

27.26.1 How much noise is too much?

Whether the exposure standard of 85 dB(A) averaged over eight hours is exceeded depends on the level of noise involved and how long workers are exposed to it. Peak noise levels greater than 140 dB(C) usually occur with impact or explosive noise such as sledge-hammering or a gun shot. Any exposure above this peak can create almost instant damage to hearing.

Decibels are not like normal numbers. They can't be added or subtracted in the normal way. The decibel scale is logarithmic. On this scale, an increase of 3 dB therefore represents a doubling or twice as much sound energy. This means that the length of time a worker could be exposed to the noise is reduced by half for every 3 dB increase in noise level if the same noise energy is to be received.

The table below (directly from the COP – Managing Noise and preventing hearing loss at work) demonstrates the length of time a person without hearing protectors can be exposed before the standard is exceeded.

Equivalent Noise Exposures LAeq,8h = 85 dB(A)

Noise Level dB(A)	Exposure Time
80	16 Hours
82	12 Hours
85	8 Hours
88	4 Hours
91	2 Hours
94	1 Hour
97	30 Minutes
100	15 Minutes
103	7.5 Minutes
106	3.8 Minutes
109	1.9 minutes
112	57 Seconds
115	28.8 Seconds
118	14.4 Seconds
121	7.2 Seconds
124	3.6 Seconds
127	1.8 Seconds
130	.09 Seconds

Essentially, a worker who is exposed to 85 dB(A) for 8 hours receives the same noise energy as someone exposed to 88 dB(A) for 4 hours, with the balance of the day in a very quiet environment. In both cases the exposure standard is not being exceeded. However, being exposed to 88 dB(A) for more than 4 hours would mean that the standard is exceeded. Similarly, if a worker is using a machine that generates 121 dB(A) then the exposure standard would be exceeded after only 7.2 seconds.

There is a big range in different people's susceptibility to hearing loss from noise. Research shows that 8-houraverage daily noise exposure levels below 75 dB(A) or instantaneous peak noise levels below 130 dB(C) are unlikely to cause hearing loss. With progressively increasing levels, the risk becomes greater.

The WHS Regulations set the exposure standard for noise at an LAeq,8h of 85 dB(A) and a peak noise level at140 dB(C), which protects most but not all people. Therefore, workplace noise should be kept lower than the exposure standard for noise if reasonably practicable.

27.27 Office Safety

Occupational Overuse Syndrome (OOS) is a term used for a range of conditions characterised by discomfort or pain in the muscles, tendons or other soft tissue. OOS onsets over time and is caused by repetitive manual activities. OOS hazards include poor work organisation and workstation layout and badly designed computer environment.

Council is responsible for ensuring workers are aware of the potential hazards of OOS, and will provide information, instruction and training to workers on the causes and symptoms of OOS. Council will also keep under review the systems of work and the working environment to ensure the potential causes of OOS are either eliminated or actively controlled/minimised.

Council also acknowledges that in many situations there are a number of workplace environmental factors, which combine to contribute to the cause of the condition. Supervisors are to ensure workers understand and follow the risk management procedures to prevent the onset of OOS, for carrying out all activities in a safe manner and in accordance with procedures. In particular workers are to observe risk management procedures to prevent OOS.

Safety procedures for OOS include:

- Checking workstation layout
- Adjustable chairs with lumbar support/ergonomic furniture
- Minimising repetitive tasks
- Taking work breaks
- Exercise to stimulate blood flow, reverse effects of muscle tension & help relaxation
- Maintaining correct postures and vary them often
- Reporting aches and pains promptly so action can be taken

Safety procedures for computers include:

- Organising lighting to reduce glare on Visual Display Unit (VDU)
- Adjustment of brightness on VDU
- Antiglare screens for VDU
- Document holders to reduce need for twisting and slouching

Safety procedures for the use of photocopiers include:

- Use of photocopiers and laser printers with ozone filters
- Regular maintenance
- Adequate ventilation in vicinity of equipment
- Location away from staff
- Following manufacturer's instructions on removing/replacing cartridges
- Always place cover down on photocopier when in use

27.28 Securing – Plant & Equipment

All construction sites must be maintained in a secure manner. Toolbox trailers and caravans that contain tools and equipment, must be locked at all times when out of sight of the work crew. All other tools and equipment must be returned to the appropriate depository following use. No equipment is to be lent to persons other than Council workers. At the end of the shift, Supervisors and/or staff are to ensure that all compounds or buildings are securely locked.

All plant and equipment is to be secured when not in use or at the completion of the days work. Supervisors are responsible for ensuring that all keys are accountable and are noted on Council's Register of Keys.

27.29 Slings and Chains

- Only certificated personnel are to operate cranes
- Others assisting with the use of a crane should be appropriately trained and certificated where necessary
- The safety of other people, including the public, should always be ensured
- Lifting equipment such as hooks, slings should be of adequate capacity, inspected regularly and meet the relevant standards for such equipment
- Safe slinging methods should always be adopted
- Only authorised and properly trained personnel should carry out maintenance, inspection and repairs
- The operator should be aware at all times of the position of the equipment especially with relation to hazards, and be able to hear and communicate with those assisting
- Never work on an item or load suspended from a crane, especially underneath it
- Always have work supported on stable, substantial work stands or stanchions

27.30 Smoking

Smoking is prohibited by all workers and other persons at all times without exception in all Council premises, worksites, car parks, confined spaces, enclosed and open spaces including the works depot and Council Chambers, council vehicles, plant and adjacent to any building entrances or windows.

Refer - Smoking Policy WO/13/651

27.31 Synthetic Mineral Fibers (SMF)

As stated on the SafeWork NSW Website SMF) is a term used to describe a fibrous product manufactured by the process of blowing or spinning a molten mineral raw material into a fibrous 'woollen' product that is used for insulation.
SMF can be classified into three groups:

1. **Glasswool:** is manufactured by melting glass into a fibrous 'wool'
    - Used as thermal and acoustic insulation in the manufacturing and construction industry
    - Does not include fibreglass used in boatbuilding, surfboards and other industrial applications because they contain catalysts and resins which require different work practices
2. **Rockwool:** is manufactured by melting volcanic rock (usually basalt) into a fibrous 'wool'
    - Also known as slagwool
    - Used as thermal and acoustic insulation in the manufacturing and construction industry

3. **Refractory ceramic fibres (RCF):** are made from kaolin (a naturally occurring alumino-silicate clay or a synthetic mix of alumina) used as:
    - High temperature, high performance thermal insulation, eg: in furnaces, kilns and other industrial heaters
    - Insulation in the automotive, marine, petrochemical, steel, aluminium, ceramic, glass and construction industries

For over 70 years, glasswool and rockwool insulation materials have been the most widely used insulation in Australia.

Dust from glasswool and rockwool products may cause:

- Discomfort, tickling and dryness of the nose, throat and respiratory tract, especially for those who suffer hay fever, asthma or bronchitis;
- Temporary skin irritation, particularly where there is rubbing from clothing such as cuffs and collars; and
- Severe irritation to eyes

Action should be taken on a continuing basis to achieve the lowest possible level of airborne fibres and dust, using the hierarchy of controls. In the glasswool and rockwool insulation industry, engineering controls are usually the most effective control measures to implement.

Administrative controls and PPE are the least effective and the least reliable controls and must only be used for any leftover risk that cannot be controlled by a higher level control.

Administrative controls and the use of PPE rely solely on human behaviour and require constant supervision.

Engineering controls: eg local mechanical exhaust or dilution ventilation to contain or minimise exposure to fibres and dust. If working with SMF it is recommended that you visit the SafeWork website to obtain a full up to date control plan.

http://www.safework.nsw.gov.au/media/publications/law-and-policy/safe-management-of-synthetic-mineral-fibres-smf-glasswool-and-rockwool

Controls:

- Always use manual hand tools in preference to power tools to trim or cut SMF materials. (If power tools are used, they should be fitted with exhaust extraction at the point where the dust is generated or supply other effective local exhaust ventilation).
- Store packaged or in intact containers or under sheet covers in low traffic areas and transfer from storage to the point of use in sealed containers or bags. Take care when opening boxes or bags to minimise dust release
- Spray or gun glasswool and rockwool materials in a wet, rather than dry form where possible
- Regularly clean the work area to remove any build up of fibres and/or dust. Visible waste materials should be removed promptly to avoid being trampled and spread about
- Selection, wearing and maintenance of PPE

27.32 Storage and Material Handling

All heavy or frequently used materials should be stored at waist level. High level storage of any material should be phased out unless there is specialist equipment available (e.g. picking/access platforms or palletised mechanical handling equipment) with adequate space to accommodate these.

Until high level storage is eliminated, material stored above 1.8 metres must not be heavy and/or awkward, contain toxic or dangerous substances or stored in easily breakable containers.

Where picking platforms etc are unavailable or impractical, material must be accessed from high level storage by two people using an appropriate, well maintained ladder and only where the three . Desks, chairs or other such items will not be used to access material.

- All aisles and passageways must be kept clear at all times to avoid slips, trips and falls while handling loads
- All stacks must be stable and there be sufficient space for moving stock
- Material will be stored in bins or racks, and shelves will be free of rubbish
- Pallets must be in good repair

27.32.1 Material Handling

The use of specialist equipment to assist with manual handling tasks is encouraged as it not only minimises the risk of injury, it allows efficient use of human resources. All ergonomic hazards relating to poor design of tools or equipment or work station are to be identified and controlled. Poorly designed tools will be eliminated where possible.

27.33 Thermal Comfort

With regard to the working environment the following factors need to be taken into consideration:

- Daytime outdoor work requiring physical activity in hot weather conditions
- Working in environments with inadequate temperature or ventilation controls

Council will seek to ensure appropriate work and rest regimes relative to working conditions and work being carried out. Safe systems of work must ensure that all workers:

- Can identify the signs of heat-related illness
- Know how to observe and monitor their co-workers
- Know what to do if a co-worker seems affected
- Know what immediate first aid to give to an affected worker, and when to call for further medical assistance

Appendix No 5: Recognising and Treating Heat Related Illness at Work

Managers

Are responsible for ensuring the following procedures are implemented, reviewed and remedial measures implemented.

Supervisors

Are responsible for ensuring tasks are carried out according to procedures and any PPE is used as instructed

Workers

Must carry out all activities in a safe manner according to procedures and training

- Consult with staff about their working environment
- Complete a risk assessment for work activities
- Consider assessing physical fitness of all workers required to work hot areas
- Use of mechanical aids to limit physical exertion
- Limit operating times
- Provision of fluids
- Allow for frequency of breaks
- Rotate staff to reduce exposure
- Monitor work rest regimes
- Review first aid arrangements and emergency procedures for prompt response
- Provision of PPE
- Training staff to look for warning signs of physical distress

27.34 Vaccination

Council may provide vaccination to relevant permanent and temporary workers against Hepatitis upon commencement of employment. Council is obliged under the WH&S Act to provide a safe workplace; therefore, Council will offer and encourage vaccination to workers in defined risk areas. All new workers in the identified areas will be required to undergo vaccination. If a person refuses vaccination, then any proceedings are to be documented and signed by all personnel involved. This action will be necessary to ensure Council has taken all reasonable steps to comply with the WH&S Act.

- **Hepatitis A** – Workers at risk will receive the prescribed course of vaccination if their level of immunity indicates that vaccination is required. Information received indicates the course of vaccine will provide years of protection against the virus, even though the length of time of protection has not been fully proven and regular testing for immunity should be carried out..
- **Hepatitis B** – Workers at risk will receive the prescribed course of vaccination. If the worker is found to be a low responder to Hepatitis B vaccination, they will receive a booster injection, then another blood test for immune response. Another booster and subsequent test may be provided to workers 5 years from the date of determination of the individual's immune response.
- **Q-Fever** – Workers at risk will attend a medical practitioner. At the first visit, blood for Q fever serology is taken and an intradermal skin test is administered. At the second visit, the skin test is read and clients who show negative results for skin and serology tests are then offered vaccination.
- **Tetanus** – Workers at risk may receive a tetanus injection upon request.

The cost of vaccinations, blood test and boosters will be borne by Council. Any further testing/boosters at the worker's own request will be at their cost. Correct hygiene practices must still be adhered to disposal of discarded syringes, wearing of gloves, protective clothing and equipment, hand washing regularly.

27.35 Welding

Welding processes create their own degree of risk, which must be managed to avoid short term and long term effects such as "welding flash" and other eye injuries, burns, and inhalation of fumes which can cause longer term illness.

- Use PPE listed in SOP
- All persons who weld should be properly trained
- Where it is not possible to ensure good ventilation, a suitable respirator should be worn
- Never attempt to connect or change welding cables before switching off the power at the mains first
- Gas bottles are to be securely fixed to trolleys
- Fire extinguisher must be near the work area
- Vision screens must be used for electric welding
- LPG bottles must be within 10 year stamp

27.35.1 Gas Welding

- Under no circumstances should any fittings of oxyacetylene equipment be allowed to be contaminated with grease or oil
- Regular maintenance must be carried out
- Operators should never use equipment fitted with a regulator in which a creep condition is known to exist
- Use the correct colour and type of hoses and fittings recommended by the manufacturers
- Oxy-acetylene equipment should not be left near hot equipment or metals which could burn the leads
- Gas leaks can be tested by using soap and water
- Follow appropriate practices and ensure the health and safety of yourself and others
- Back Flash devices must be fitted to gas bottles

27.36 Working on or Near Water

The following situations can be fatal to persons who enter or work near still or flowing water:

- A leak associated with pipes in irrigation dams or water storage supplies. The difference in pressure of water in the leaking pipe and the surrounding water can create a suction force
- Increased suction force at the up-stream side of screens, because of pressure differences. The force is greater if the screen is partially blocked
- Increased suction force near the outlet in gravity-feed water supply systems
- Inadequately guarded mechanical or electrical pumps, where there is a risk of injury to divers or other persons
- Unknown debris which is below the surface

The following factors have also contributed to the problem and must be noted:

- Failure of safety lines or techniques, because of miscalculation of the force of flowing water
- Failures of diving masks and/or air supply because of increased water pressures (water velocities)

27.37 Workplace Violence

Council is committed to providing workers and visitors with a healthy and safe environment for work that is free from bullying and violence whether from internal or external sources. Council recognises that workers and visitors at the Council are entitled to be treated with dignity and respect.

Personal threats at work are rare but occasionally arise from fellow workers, management, customers or even a stranger. The worker's *psychological welfare* is protected under the Work Health and Safety Act 2011 in addition to their physical wellbeing and it is the responsibility of the Council to ensure that personal threats of any kind are not tolerated.

Workplace violence can take many forms including:

- Physical assaults
- Threatening behaviour
- Verbal abuse
- Racial or sexual harassment
- Bullying or intimidation
- Victimisation
- Undermining behaviour
- Humiliation

The Council acknowledges workplace violence is not restricted to physical actions and includes a range of inappropriate psychological pressures, which a worker could be subject to either from workplace peers or from supervisors or managers. The effect is to make the worker feel insulted, offended, intimidated and unable to work effectively and feel unsafe at work. In general, behaviour or statements by managers or supervisors which could be considered to demean the worker is workplace violence and is inappropriate in the Council's view. Workers should:

- Know their rights
- Report any incidences immediately. Action must be taken by the council
- Know who to report to – Supervisor or WH&S Coordinator
- Know they can remove themselves from the situation if threatened or otherwise at risk

Preventative measures to be implemented include:

- Workers provided with information about what constitutes inappropriate behaviour
- Training in Equal Employment Opportunity and Anti-Discrimination
- Better work organisation and job design to reduce likelihood of stress, tension and aggression
- Creating a culture of respect

29. Preschool

Walcha Preschool forms part of Walcha Council and as such Council ensures that Preschool has an exhaustive set of Policy and Procedures that are compliant with the appropriate government department relating to childcare services.

30. Walcha Council Community Care (WCCC)

WCCC forms part of Walcha Council and as such Council ensures that WCCC has an exhaustive set of Policy and Procedures that are compliant with the appropriate government department relating to aged care providers.

31 STANDARD FORMS

The following standard forms OR SWMS can be located in TRIM:

Form No	Name of Form	Trim
WH&S-01	Site Specific Risk Assessment, Control & Induction Record	WINT/17/966
WH&S-02	Worksite Safety Audit	WINT/17/967
WH&S-03	Manual Handling Screening Checklist	WINT/17/968
WH&S-05	Confined Spaces Entry Permit	WINT/17/970
WH&S-06	Site Safety Rules	WINT/17/971
WH&S-07	Accident and Emergency Procedures	WINT/17/972
WH&S-08	Worker Risk Assessment Control Plan	WINT/17/998
WH&S-09	Incident and Injury Register	WINT/17/974
WH&S-10	Vehicle/Plant Accident Report	WINT/17/975
WH&S-11	Hazardous Substances Register and SDS	WINT/17/976
WH&S-12	Toolbox Record	WINT/17/977
WH&S-13	Major Plant Prestart Checklist	WINT/17/978
WH&S-15	Work Site Safety Compliance Advice	WINT/17/979
WH&S-16	Compliance Audit Summary	WINT/17/980
WH&S-17	Certificates, Permits, and Licensing WHS	WINT/17/981
WH&S-18	Site Specific WH&S Induction Checklist	WINT/17/982
WH&S-20	Lock Out Register	WINT/17/983
WH&S-21	Hot Work Permit	WINT/17/984
WH&S-22	Purchasing of Goods or Services Checklist	WINT/17/985
WH&S-23	Chemical Checklist	WINT/17/987
WH&S-24	Volunteer Risk Assessment	WINT/17/988
WH&S-25	Electrical Equipment Risk Assessment & Inspection Checklist	WINT/17/989
WH&S-26	Safety Inspection Checklist	WINT/17/997
Blank	SWMS	WINT/17/54
WC-S01	Working Near Traffic	WINT/17/267
WC-S02	Mobile Plant	WINT/17/268
WC-S06	Confined Spaces	WINT/17/269
WC-S07	Excavation and Trenching	WINT/17/270
WC-S08	Overhead Powerlines	WINT/17/271

WC-S09	Working Near Underground Utilities	WINT/17/272
WC-S10	Working at Heights	WINT/17/273
WC-S13	Working Over on or Near Water	WINT/17/274
WC-S14	Hazardous Chemicals and Dangerous Goods	WINT/17/276
WC-S15	Traffic Control	WINT/17/277

Preschool Forms

Indoor Safety Checklist – Template	WINT/13/2464
Outdoor Safety Checklist – Template	WINT/17/1120
Accident Incident Illness Report Form	WINT/15/2016

Appendices

Appendix No 1: Return to Work – Recover at Work Policy – WINT/17/35

WALCHA COUNCIL

RETURN TO WORK – RECOVER AT WORK POLICY

INTRODUCTION

Walcha Council is committed to preventing injury and illness through providing a safe work environment and providing for the welfare of all our employees. However, in the event of an injury at work Council is committed to ensuring where possible our workers Return to Work (RTW) to enable them to Recover at Work (RAW).

POLICY

This Policy will outline the following procedures:

- **Employer Commitment to providing a safe work environment**
- **Procedures i**
- **Notification of injuries**
- **Recovery**
- **Return to Work**
- **Suitable Duties**
- **Dispute resolution**
- **Contacts**
- **Information for workers**

EMPLOYER COMMITMENT

Walcha Council is committed to the return to work of our injured workers and will endeavour to:

1. Prevent injury and illness by providing a safe and healthy working environment
2. Participate in the development of an injury management plan and ensure that injury management commences as soon as possible after a worker is injured
3. Support the injured worker and ensure that early return to work is a normal expectation
4. Provide suitable duties for an injured worker as soon as possible
5. Ensure that our injured workers (and anyone representing them) are aware of their rights and responsibilities – including the right to choose their own doctor and approved workplace rehabilitation provider, and the responsibility to provide accurate information about the injury and its cause
6. Consult with our workers and, where applicable, unions to ensure that the return to work program operates as smoothly as possible
7. Maintain the confidentiality of injured worker records
8. Not dismiss a worker as a result of a work related injury within six onths of becoming unfit for employment.

Return to Work – Recover at Work Policy – V1.1

WALCHA COUNCIL

RETURN TO WORK – RECOVER AT WORK POLICY

PROCEDURES

1. **Notification of injures**
- Notify all injuries to the supervisor as soon as possible
- Record all injuries in the Register of Injuries
- Notify StateCover of all injuries within 47 hours of notification

2. **Recovery**
- Ensure that the injured worker receives appropriate first aid and/or medical treatment as soon as possible
- Consult with the doctor nominated by the injured worker and who is responsible for the medical management of the injury and assist in planning return to work

3. **Return to work**
- Arrange a suitable person to explain the return to work process to the injured worker
- Ensure that the injured worker is offered the assistance of a SafeWork approved workplace rehabilitation provider if it becomes evident that they are not likely to resume their pre-injury duties, or cannot do so without changes to the workplace or work practices

Nominated SafeWork approved workplace rehabilitation providers:

Name of Nominated Rehabilitation Provider: IPAR

Address:

13 Darling Street

TAMWORTH NSW 2340

Phone:	02 6766 1444
Fax:	02 6761 2991
Email:	rehab@ipar.com.au
Website:	http://www.ipar.com.au

- Arrange for the worker's early return to work to allow the process of Recovering at Work (subject to medical and rehabilitation provider advice).

WALCHA COUNCIL

RETURN TO WORK – RECOVER AT WORK POLICY

4. Suitable Duties

- Develop an individual return to work plan when the worker according to medical advice, is capable of returning to work.
- Provide suitable duties that are consistent with medical advice and that are meaningful, productive and appropriate for the injured worker's physical and psychological conditions depending on the individual circumstances of the injured worker. Suitable duties may be:
  - At the same worksite or a different worksite
  - The same job with different hours or modified duties
  - A different job
  - Full time or part time

5. Dispute Resolution

- Work together with the injured worker and their union representative to resolve any disagreements about the return to work program or suitable duties
- If disagreements cannot be resolved, involve other parties such as the worker's treating doctor, the agent/insurer, an approved workplace rehabilitation provider or an injury management consultant

CONTACTS

Workplace contact for return to work program:

Name: Amelia Kompler Phone: 6774 2500

Workers compensation agent/insurer

Name: StateCover – Senior Case Manager Norman Habib

Phone: 02 8235 2812 Fax: 02 8004 8253

Email: norman.habib@statecover.net.au

Address: PO Box R1865, Royal Exchange NSW 1225

Website: www.statecover.com.au

SafeWork Claims Assistance Service: 13 10 50

Workers Compensation Commission for resolution of disputes
www.wcc.nsw.gov.au

WALCHA COUNCIL

RETURN TO WORK – RECOVER AT WORK POLICY

Information for workers

You have the right to:

- Nominate your own treating doctor who will be involved in your Injury Management plan
- Choose your own approved workplace rehabilitation provider if necessary
- Be actively involved in the planning of your return to work and the completion of your Recover at Work Plan

You MUST:

- Take care to prevent work injuries to yourself and others
- Notify your employer of an injury as soon as possible
- Comply with your Injury Management plan including adhering to your Recover at Work Plan
- Provide accurate information about any aspect of your claim
- Notify the agent/insurer if you get a job or if you earn extra income from your job while you are receiving weekly benefits
- Attend medical and rehabilitation assessments
- Cooperate in workplace changes that will assist other injured workers

If you do not comply with your Injury Management plan/Recover at Work Plan, the agent/insurer may suspend your benefits.

Return to Work – Recover at Work Policy – V1.1

Appendix No 2: Return to Work Plan – Template – WINT/15/2114

Walcha Council
Return to Work Plan

Plan Number:	
Date:	

Return to Work Plan	
Name & Address	
Date of injury or illness	
Injury or illness description	
Return to work goal	
Position Title	
Reporting to	
Suitable duties to be performed	
Additional requirements	➡ Contact number of Injury Management Coordinator is - 67742500
Rest Breaks	➡ As and when required.
Duties to be avoided	➡
Hours/Days of work	➡ Normal hours of work and regular breaks
Return to work effective	
Date to be reviewed	

1 WINT/15/2114

Walcha Council
Return to Work Plan

The following parties agree to the above return to work plan by signing below			
I have been consulted about the content of this RTW plan and agree to participate			
Employee (name)			
Employee (signature		Date	
I agree to ensure that the RTW plan is implemented in the work place			
RTW supervisor (name)			
RTW supervisor (signature)		Date	
I agree to monitor this RTW plan			
Injury Management coordinator (name)			
Injury management coordinator (signature)		Date	
I approve this RTW plan			
Treating doctor (name)			
Treating doctor (signature)		Date	

Please Note:

1. There is to be NO alterations to this RTW plan without prior consultation wit the Injury Management Coordinator.
2. Strict adherence to the RTW plan is required. Non compliance with work restrictions may result in disciplinary action.

The Injury Management Coordinator

Name: Amelia Kompler.
Phone Number: 02 6774 2500
Fax: 02 6777 1181
Email: council@walcha.nsw.gov.au
Address: PO Box 2, Walcha NSW 2354

WALCHA COUNCIL

RECOVER AT WORK (RAW) PROGRAM

Council Commitment

Walcha Council is committed to the return to work of our injured workers and will:

1. prevent injury and illness by providing a safe and healthy working environment
2. participate in the development of an injury management plan and ensure that injury management commences as soon as possible after a worker is injured
3. support the injured worker and ensure that early return to work is a normal expectation
4. provide suitable duties for an injured worker as soon as possible
5. ensure that our injured workers (and anyone representing them) are aware of their rights and responsibilities – including the right to choose their own doctor and approved workplace rehabilitation provider, and the responsibility to provide accurate information about the injury and its cause
6. consult with our workers and, where applicable, unions to ensure that the return to work program operates as smoothly as possible
7. maintain the confidentiality of injured worker records
8. not dismiss a worker as a result of a work related injury within six months of becoming unfit for employment.

Procedures

1. Notification of injuries
   - Notify all injuries to the supervisor as soon as possible.
   - Record all injuries in the Register of Injuries.
   - Notify StateCover of all injuries within 48 hours.
2. Recovery
   - Ensure that the injured worker receives appropriate first aid and/or medical treatment as soon as possible.
   - Consult with the doctor nominated by the injured worker and who is responsible for the medical management of the injury and assist in planning return to work.
3. Return to work
   - Arrange a suitable person to explain the return to work process to the injured worker.

Recover at Work Program V1.1

WALCHA COUNCIL

RECOVER AT WORK (RAW) PROGRAM

- Ensure that the injured worker is offered the assistance of a SafeWork approved workplace rehabilitation provider if it becomes evident that they are not likely to resume their pre-injury duties, or cannot do so without changes to the workplace or work practices.

Nominated SafeWork approved workplace rehabilitation providers:

- Arrange for the worker's early return to work (subject to medical and rehabilitation provider advice).

4. Suitable duties
   - Develop an individual return to work plan when the worker according to medical advice, is capable of returning to work.
   - Provide suitable duties that are consistent with medical advice and that are meaningful, productive and appropriate for the injured worker's physical and psychological condition depending on the individual circumstances of the injured worker. Suitable duties may be:
     - °°at the same worksite or a different worksite
     - the same job with different hours or modified duties
     - a different job
     - full time or part time.
5. Dispute resolution
   - Work together with the injured worker and their union representative to resolve any disagreements about the return to work program or suitable duties.
   - If disagreements cannot be resolved, involve other parties such as the worker's treating doctor, the agent/insurer, an approved workplace rehabilitation provider or an injury management consultant.

WALCHA COUNCIL

RECOVER AT WORK (RAW) PROGRAM

Contacts

Workplace contact for return to work program

Name: Amelia Kompler Telephone: 02 6774 2500:

Workers compensation agent/insurer

Name: StateCover Telephone: 02 8235 2812

Address: PO Box R1865, Royal Exchange NSW 1225

Website: www.statecover.com.au

SafeWork Claims Assistance Service on 13 10 50

Workers Compensation Commission for resolution of disputes www.wcc.nsw.gov.au

Information for workers

You have the right to:

- nominate your own treating doctor who will be involved in your injury management plan
- choose your own approved workplace rehabilitation provider if necessary•
- be actively involved in the planning of your return to work.

You must:

- take care to prevent work injuries to yourself and others•
- notify your employer of an injury as soon as possible• comply with your injury management plan•
- provide accurate information about any aspect of your claim•
- notify the agent/insurer if you get a job or if you earn extra income from your job while you are receiving weekly benefits•
- attend medical and rehabilitation assessments• cooperate in workplace changes that will assist other injured workers.

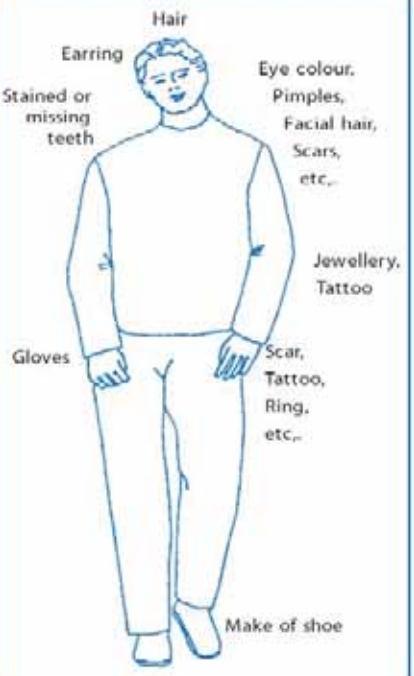
If you do not comply with your injury management plan, the agent/insurer may suspend your benefits.

Appendix No 4 – Offender Identification Form – WINT/17/70

Description Form

If you're a victim or witness to a crime, please complete this form by yourself. If you are unsure of an answer, don't guess - leave it blank. If there are other witnesses, record their names at the base of page and ask them to complete these descriptions on a piece of paper.

NSW Police Force



DESCRIPTION OF OFFENDER

Age:

Race:

Build:

Weight:

Height:

Complexion:

CLOTHING (Use diagram to show particular marks/ patterns)

Upper body:

Lower body:

Headwear:

Footwear:

Bag:

Other:
(Include: Jewellery/scars/tattoos/deformities etc):

BEHAVIOUR - (include words/spoken, accent & mannerisms)

To report suspicious activity, phone **Crimestoppers** on **1800 333 000**.
In the event of an **emergency**, phone **Triple Zero (000)**.

COMPLETED BY

☐ Police
☐ Victim
☐ Witness

Name (print):

Address:

Contact No.: (Home)

(Work)

(Mob)

Signature

Date ____ / ____ / ____

Time:

OTHER WITNESS

Name (print):

Address:

Contact No.: (Home)

(Work)

(Mob)

FIREARMS

HANDGUNS

Long Barrel Revolver

Large Automatic

SAWN OFF SHOTGUNS

Pump Action

OTHER WEAPONS

Other - Illustrate

Descriptions:

☐ Syringe
☐ Club
☐ Screwdriver
☐ Other

Blade Colour: .....
Blade Width: .....
Blade Length: .....

Handle Colour: .....
Handle Material: .....
Handle Length: ..... ☐ ..... ☐ .....

VEHICLE (damage, accessories etc.)

TYPE

☐ Sedan
☐ Station Sedan
☐ Utility
☐ Panel Van
☐ Bicycle
☐ Motor Bike
☐ Other Vehicle

Driver Side

Passenger side

State Reg.	Reg. No.	Year	Make	Model	Colour

DISTINGUISHING FEATURES

☐ Automatic
☐ Bucket seats
☐ Cassette
☐ Column gears
☐ Custom wheels
☐ Damage
☐ Extras
☐ Floor gears
☐ Instruments
☐ Manual
☐ Modified
☐ Radio
☐ Rust/Primer
☐ Seat Covers

Appendix No 5 – Recognising and Treating Heat Related Illness at Work

NSW GOVERNMENT | SafeWork NSW

RECOGNISING AND TREATING HEAT-RELATED ILLNESS AT WORK

FACT SHEET

Workers who are exposed to extreme heat or work in hot environments (both indoor and outdoor) may be at risk of heat-related illness (formerly known as heat stress), which can be fatal.

Heat-related illness is a term used to describe a range of increasingly harmful medical conditions that can happen when the body is unable to cool itself down enough to maintain a healthy temperature.

Stages of heat-related illness	Symptoms	WHAT TO DO
1. Dehydration comes first. It causes the heart to work faster and leads to reduced fluid being available to sweat. Being dehydrated by just 2% impairs a person's performance in tasks that require attention, coordination and immediate memory skills. Dehydration can also cause painful heat cramps in muscles from the loss of salt and water (usually affects people who sweat a lot during strenuous activity).	People can experience: • mild to severe thirst • dry lips and tongue • decreased amount of urine passed that appears darker than normal • increased breathing and heart rate • weakness or light-headedness (particularly when standing)	Immediate first aid • Move the person to a cool place with circulating air, such as a site shed (air-conditioned where possible) or in a shaded area • Loosen all tight clothing and remove unnecessary garments, including PPE (mask, apron, overalls, etc). • Give the person cool (not cold) fluids to drink – preferably water. • Obtain medical advice if symptoms don't improve.
2. If dehydration is not treated, it can lead to heat exhaustion, which is the body's response to the excessive loss of water and salt from sweating.	People can experience: • feeling hot, exhausted, weak and fatigued • persistent headache • intense thirst as well as nausea and vomiting • feeling dizzy and faint • being clumsy with slower reaction times • poor judgement • rapid breathing and shortness of breath • rapid weak pulse, palpitations • tingling, numbness of fingers and/or toes • visual disturbance.	Immediate first aid and medical treatment • Follow DRSABCD emergency protocol (Danger, Response, Send for help, Airway, Breathing, CPR and Defibrillation). Call for an Ambulance - triple zero (000). • Move the patient to lie down in a cool place with circulating air, such as a site shed (air-conditioned where possible) or a shaded area • Loosen all tight clothing and remove unnecessary garments, including PPE (mask, apron, overalls, etc). • Apply cold packs or wrapped ice to neck, groin and armpits. *continued over...*

LET'S TALK SAFETY

RECOGNISING AND TREATING HEAT-RELATED ILLNESS AT WORK

FACT SHEET

Stages of heat-related illness	Symptoms	WHAT TO DO
3. If heat exhaustion is not treated, it can lead to heat hyperpyrexia (a medical term meaning 'an extremely high rise of core body temperature that is equal to or higher than 40.5 °C').	People can experience: • moist skin • mental dysfunction, such as poor judgement, slower reaction times, irritability, clumsiness, etc.	Immediate first aid and medical treatment (continued) • Cover the person with a wet sheet (or similar) until the ambulance arrives. If a wet sheet isn't practicable, sponge the person down with cool (not cold) water and fan them with gentle air movement until the ambulance arrives. • Important: Be careful the patient doesn't start to shiver – it's an automatic muscular reaction which will make the core body temperature rise even further. If shivering happens, remove the wet sheet / stop sponging immediately and cover the patient until they stop shivering. Once they have stopped, commence sponging the patient again with cool (not cold) water. • Ensure an ambulance has been called – triple zero (000) so the patient can be assessed at the scene and, if considered necessary, transferred to hospital to receive medical attention. • If conscious and able to swallow, give the patient cool (not cold) fluids to drink – preferably water. • Ring the ambulance again to advise if the person has a seizure or becomes unconscious.
4. If heat exhaustion is not treated, it can result in heat stroke, which is a **life-threatening medical emergency and potentially fatal.** Heat stroke occurs when the core body temperature rises above 40.5°C.	**Victims stop sweating and develop flushed, dry, hot skin.** Other symptoms include: • oral or armpit temperature readings of possibly over 41°C • pounding rapid pulse • headache, nausea and/or vomiting • dizziness and visual disturbances • being clumsy with slower reaction times • poor judgement • irritability and mental confusion which may lead to collapse, fitting and unconsciousness.	

Heat-related illness can also cause:

- worsening of existing medical conditions
- unprecedented or unanticipated health problems that haven't previously existed
- Heat rash (*prickly heat*) – an itchy rash of small raised red spots on the face, neck, back, chest and thighs caused by hot and moist environments.

Catalogue No. SW08496
SafeWork NSW, 92-100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252
Customer Service Centre 13 10 50
Website www.safework.nsw.gov.au