

## **MURRAMARANG COMMUNITY GARDEN – WHS PLAN**

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## SECTION 1 – PREAMBLE

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### Purpose

This Workplace Health and Safety (WHS) Plan is a key component of the duty of care of the Murramarang Community Garden (MCG) organization as a “Person Conducting a Business Undertaking” (PCBU) in conformance with the NSW Workplace Health and Safety Legislation.

It is a simple, stand alone plan that seeks to coordinate with the WHS planning system of the Australian National University (ANU), the owner of the premises upon which the MCG operates.

It covers the protection of the health, safety and well-being of people at the MCG site ie volunteers, contractors and visitors.

The purpose of this (WHS) Plan is to provide safety and general workplace guidance to (MCG) members.

This WHS Plan is to be read in the context of the MCG Plan of Management and consistent with the occupancy agreement between the MCG and the ANU.

### Entity

Murramarang Community Garden (Inc) the PCBU. An incorporated community volunteer organisation. Located on ANU premises at Murramarang Road, Kioloa. NSW 2539.

### Business

A community garden growing fruit and vegetables in both private and communal plots. It is place of education for community people interested in gardening. It also provides play facilities for small children of visiting MCG members.

A visiting place for invited otherwise abled adults to come for supervised outings under the auspices of accredited MCG members.

### The Site

The MCG Site comprises about 1 Hectare of land rented from ANU.

Access is by road from the ANU gate to a car park on the South side of the site. There are two access gates on the South perimeter and one on the East perimeter.

The site is fenced on the perimeter and divided by fence into two compounds. Water supply is via two pipelines from the two turkey nest dams up the hill owned by ANU. There are two Stop Valves. Located in pits on the West side of the inner enclosure and the West side of the outer enclosure. Water is reticulated

in the MCG site by underground polythene piping to strategically located taps. Diagram on MCG web site.

The site is level and mostly grassed around the plots.

Buildings and structures currently comprise:

- Shipping container. Secure lock up for tools and PV and battery system.
- Lean to Lunch space attached to Shipping container. Provides a covered gathering space.
- Site shed (Sandra's shed). Storage for fuels chemicals and fertilisers and general goods.
- Composting Toilet Clivus Multrum. New shed and ramp 2019. Can be used by wheelchair with carer. Hand washing facilities attached.
- Netted enclosure 6m x 6m x 3m for figs and persimmon.
- Potting shed. Currently used for storage of pots and hoses.
- Netted enclosure for the Blueberries.
- Row of compost bins on East side of the site.
- Three Beehives located in the north west corner of the MCG site and managed by an accredited apiarist.

## Accidents and Medical Emergencies

Accidents and Emergencies may arise from time to time. They can be:

### Injury or Medical Emergency

While MCG takes every care there is always the scope for an injury or medical emergency particularly in an odder cohort of people. In general terms MCG policy is to:

- apply immediate first aid to treat small incidents and to stabilize major incidents; and
- summon appropriate medical assistance via the emergency 000 phone system.

### Emergencies eg Fire

Fire should be a very rare occurrence. MCG policy is:

- Take first hand measures to extinguish;
- If the fire is significant, call Emergency 000 and notify ANU Kioloa Site Manager 0416 128 776;
- If the fire cannot be fought, evacuate and warn the ANU Kioloa manager.

### Reporting of Incidents

Any incident involving injury, near miss or medical emergency is to be reported to the MCG Management who is to complete and to maintain a comprehensive record of the incident.

## Maintenance Safety

MCG respects the need for safety in the maintenance of critical or potentially hazardous systems. All electrical work is carried out by a licensed electrical contractor.

### Authorised Officers

For the management of this WHS Plan key MCG officers are:

MCG Secretary/Public Officer – Currently Judith Carroll

MCG Garden Manager – Currently Harley Delves

MCG Committee member – Don Davidson, author of this WHS Plan

### Consultation

The following have been consulted in the preparation of this WHS Plan.

- The MCG Committee
- Dr Margaret Davidson MAOH Western Sydney University
- Mr Harley Delves MCG Garden Manager
- Mr Doug Howarth, MCG member, lawn mower.
- NSW Workplace Health and Safety Act 2011

### Communication

MCG values courteous and timely communication - particularly regarding WHS issues.

The MCG WHS Plan content is intended for a volunteer non-specialist audience.

It is part of the induction process for membership.

Informal discussion of WHS is encouraged at gatherings such as meetings and morning tea.

Specific WHS issues related to a significant task will form part of the task briefing before work commences.

## SECTION 2 – WHS BRIEFING FOR MCG GARDENERS

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**This Section is to be read and understood by all MCG Members and is to form part of the MCG Induction process.**

### People - General Risks – Guidance to Gardeners

Gardening is a pleasurable activity, which we generally take for granted. It does, however, carry risks. This Section outlines general hazards involved in gardening. The hazards discussed are not exhaustive. Please use commonsense. **If in doubt, ask.**

#### Weather

People are subject to sun and rain heat and cold. Dress sensibly with long sleeves and trousers and hat to avoid sun and heat. Sunscreen is advised on bright days. If it is hot, do not over exert yourself and remain hydrated. In cold and wet weather, rug up as necessary to keep comfortable.

#### Fatigue

Fatigue can lead to errors of judgment when using tools. If tired, take a break and do not attempt to use tools, particularly powered tools.

#### Injury

Gardening involves using tools both hand and mechanical. These are usually designed to cut or to make holes in soil and structures. To avoid them making holes in you:

- Wear stout footwear. No open footwear in the garden.
- Where needed wear gloves, hearing and eye protection commensurate with the job.
- Only use tools that are in good condition and are appropriate to the task in hand.
- Only operate mechanical equipment with which you are familiar and qualified to operate.
- Be aware of your surroundings when working; eg No people in the way when you swing that axe or spade. Make sure you know where you are putting your hands and feet and there are no holes or trip hazards around you.
- Do not take on tasks that you are uncertain about or which are too heavy etc. Seek guidance and assistance.
- When operating mechanical equipment such as a chainsaw, a safety person is to be present.
- Falls and trips are particularly hard on older people. Keep your site tidy and necessary holes either covered or clearly marked.
- Ladders are a major cause of injury especially for older men. Ensure the ladder is in good condition and appropriately secured. If it is high; i.e.

above 1.5 m off the ground have a safety person with you. Do not use improvised ladders; eg stacked milk crates.

### Lifting or Moving Heavy Objects (See also Safe Work Plan #n Handling of Heavy Objects)

Many home gardeners and homeowners are injured through attempting to move heavy objects. Strained backs and crushed feet and fingers are typical injuries.

If you need to move or lift a heavy object:

- Assess the need for the job in the first place. In the MCG, heavy lifts are rare occurrences.
- Scope out the task. What has to be done, what is needed, any site hazards?
- Get assistance.
- Ensure a safety person is watching the operation
- Ensure the site is safe. No trips or holes.
- Use only appropriate equipment that is in good condition.
- Do not place yourself under a heavy object or between it and a hard place.

### Impact

Impact can come from vehicles, the back of an axe or falling objects. It has the potential to do a lot of damage.

- Drive carefully
- When operating machinery or lifting gear ensure it is good order be site aware that feet and fingers are not in the way.
- When operating hand tools again; be site aware; eg hammering operations or swinging a shovel. Protect feet and fingers with stout boots and gloves respectively.

### Electricity

Misuse of Electricity is potentially fatal.

- Do not play with electricity. Only qualified electricians are to work with wiring or maintain electrical equipment.
- As a rule, battery powered tools only are to be used on the MCG site.
- The Garden manager or the WHS Officer, **only**, may approve the use of 240V tools and/or generator for a specific task where Battery powered tools do not meet a task need. **This will be managed on a task by task basis under specific instructions.**

### Fuels (See also Safe Work Plan Operation of Machinery)

Petrol is commonly used in garden equipment such as mowers. It is extremely flammable and is often taken for granted.

- Fuel is to be kept in limited quantities in approved containers only.
- NO SMOKING is to be tolerated anywhere where fuel is being stored, decanted or used. **The whole MCG site is a No Smoking area.**
- Take care when filling not to overfill or spill fuel.
- Mop up any spillage and wait for all vapour to clear before starting the machine.
- Do not refuel a hot machine.

### Fire

Fire is a present hazard when working with fuels or other inflammables.

- Conduct all fuelling operations cleanly and safely.
- Do not permit spark or heat generating activities; eg grinding or welding anywhere near fuel.
- Do not use lawnmowers or other machinery on a Fire Danger day.
- When using machinery, be aware of surroundings such as dry vegetation.
- Where activities such as angle grinding or other similar heat producing activities have been carried out, ensure the site is thoroughly extinguished and cold before leaving. Inspect the site again about an hour later to check for any re-ignition.

### Poisons (See Also Safe Work Plan Chemical Spraying)

Gardening is often associated with poisons such as Weed killer and Insecticides. At the MCG, apart from insect repellent, organic fruit fly baits and household sprays such as pyrethrum and white oil, **all poisons are to be handled by a nominated person.** No individual spraying is to be conducted without the approval of the Garden Manager on a case by case basis.

- All poisons are to be stored in their manufacturers' containers in a secure shed.
- Poisons and their containers are to be clearly labeled.
- Poisons are to be mixed and applied according to manufacturers' specifications.
- Produce withholding requirements are to be observed
- Spraying or other dispersal equipment is to be in good condition.
- Depending on conditions, protective equipment such as long sleeves gloves, mask and eye protection is to be worn.
- Spraying is not to be conducted in windy conditions.

### Dusts

Handling of fertilisers mulches and compost can give rise to dust carrying toxins and spores which can be harmful to people. We have had a historical case of Q fever, attributed to dust from mowing over Bandicoot droppings.

- When handling dust-producing material wear a mask.
- If possible damp the material to avoid generating dust.
- Wherever possible conduct operations in open air.
- If hand mowing on a windy and dry day, wear a mask.
- Do not mow up native animal droppings for fertiliser. Apart from dust, they are often full of worms.

### Animal and Insect Interaction

Bites and stings are typical occurrences in a gardening situation. The MCG site is home to fauna including Red-bellied Black snakes, Diamond Pythons, Bandicoots, Spiders various and venomous, Ticks and Bees. Lapwing Plovers often nest on the site and are aggressive. There are Kangaroos, wallabies and stock on the roadway to the site.

- Drive carefully. Don't approach stock and wild life.

- Be careful where you put your hands when moving stones timber etc. Wear gloves if you need to.
- If you see a snake, avoid it. It doesn't want to interact with you.
- In the windbreaks and any long grass, be aware of the possibility of snakes.
- If bitten by a snake, there are compression bandages and first aid instructions in the First Aid box in the lunch shed. Stay calm, do not move unnecessarily, attract attention and **seek medical help**, by phone if necessary.
- Ticks. If you have a tick on you, do not try to pull it out. There is a tube of Lyclear, a tick killer, in the First Aid box. Apply as directed and the tick will die quickly. Always check yourself at home after gardening.
- Aggressive birds. Wear a hat and protect your eyes. Try to avoid interaction. If you see a nest report it to the Garden Manager who will arrange for its removal.
- Bee Stings. There are Beehives in the NW corner of the MCG site. The bees provide pollination and occasionally honey. They can get cranky and follow and sting intruders. Stay away from the area of the hives unless you need to be there. Mowing or brush cutting tends to arouse the bees particularly if the onset is sudden. Start equipment a distance away and move in slowly. Wear long clothing, gloves, hat and veil. Veils are kept in the Shipping Container. **If you are allergic to bees, carry your Epi Pen with you**

### General Hygiene

Hygiene is commonsense to all good gardeners.

- Wash hands and faces, particularly before eating and drinking.
- The toilet has necessary soap and water available.
- Please observe operating instructions for the toilet.

### Allergies

**Some people suffer allergies; eg to bees. Gardeners suffering from allergies should carry their medication as part of their gardening kit.**

### COVID 19 (and other Infectious diseases)

Infectious diseases such as COVID are part of our life. The MCG is a gathering place where disease could spread if precautions are not taken.

**An MCG COVID Plan gives specific direction regarding this disease. It is available on the MCG Website.**

The COVID Plan will also be effective in managing other communicable diseases such as colds and influenza. Key points are:

- If you, or a close contact, are sick do not come to the garden.
- Observe personal hygiene.
- Maintain social distance.
- Use commonsense.



### Near Misses Accidents

**Near misses and Accidents can occur from time to time. We learn from Mistakes. Report them to Garden Manager.**

### Finally – A Golden Rule

If you are contemplating a difficult or demanding task, **DO NOT** work alone. Consult the Garden Manager.

## SECTION 3 - RISK ANALYSIS

**This Section analyses key hazards identified at the MCG Site and identifies areas of significant residual risk that need to be managed specifically. It is based on a simple Risk Matrix suitable for small undertakings such as the MCG.**

**Table 1- MCG Risk Matrix**

		Consequences				
		Insignificant 1 No Injury Minimal Financial Loss	Minor 2 First Aid Medium financial Cost	Moderate 3 Medical Treatment High financial Loss	Major 4 Hospital Large financial Loss	Catastrophic 5 Death. Destruction of business
Likeli hood	Almost Certain 5 Occurs often	Medium 5	High 10	High 15	Extreme 20	Extreme 25
	Likely 4 Could easily happen	Medium 4	Medium 8	High 12	Extreme 16	Extreme 20
	Possible 3 Could happen say once per year	Low 3	Medium 6	Medium 9	High 12	High 15
	Unlikely 2 Might happen Say once in 10 years	Low 2	Medium 4	Medium 6	Medium 8	High 10
	Rare 1 Conceivable only in extreme circumstances	Low 1	Low 2	Low 3	Medium 4	Medium 5

## Hierarchy of Control

When risks are identified they must be managed to optimize worker safety. The Hierarchy of Control is a series of measures in descending order of effectiveness that can be applied to perceived hazard.

**Table 2 Hierachy of Control**

Level of Control	Example	Relative Effectiveness
Elimination	Remove the hazard completely Cease the activity Dispose of unwanted hazardous items	High
Substitution	Use less hazardous equipment or materials Break heavy items down to smaller more manageable components	
Isolation	Separate the hazard from people either by distance or physical guards	
Engineering Control	Physical aids for lifting Ventilation guard of moving parts Operational interlocks on systems	
Administrative Control	Induction Safety Briefings Safe Work Procedures Operating Instructions	
Personal Protective Equipment	Hearing and Sight Protection Gloves Enclosed protective footwear Hat, sunscreen and appropriate clothing	Low

## Assessed Areas of Significant Residual Risk at the MCG Site

### Electrical

The **Residual Risk** is assessed as **Medium**.

The **Consequence** of an incident is potentially fatal and thus is rated as **Catastrophic**.

The **Likelihood** of an incident is **Rare** given that the 240V installation in the Shipping Container is professionally installed to household wiring standards and has RCD protection. The use of 240V power tools on the MCG site is not permitted except in strictly controlled circumstances.

## Chemicals

The **Residual Risk** is assessed as **Medium**.

The **Consequence** of an incident could be hospitalisation and is thus rated **Major**.

The **Likelihood** of an incident is assessed as **Unlikely** given the precautions taken.

## Use of Machinery

Machinery here includes Petrol driven Ride on and Push mowers, Whipper Snippers, Mulchers and Chainsaws.

The **Residual Risk** is assessed as **Medium**.

The **Consequence** is assessed as **Major** as an incident could result in hospitalisation.

The **Likelihood** is assessed as **Unlikely** given the maturity of the operators and controls on the use of machinery.

## Working with Heavy or Difficult Objects

At the MCG site, these tasks are limited to moving objects at the same level or out of a shallow hole in the ground. There will be no lifting of heavy objects overhead.

The **Residual Risk** is assessed as **Medium**.

The **Consequence** of an incident could involve medical treatment and is assessed as **Moderate**.

The **Likelihood** is assessed as **Possible**.

## SECTION 4 – SAFE WORK PLANS (SWP)

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### SWP 1 - MCG Chemicals – Spraying and Hand Application

#### Date

25 March 2021

#### Top Residual Risk

Medium. An event is unlikely. An event could result in hospitalisation

#### Hazards Identified

##### Chemical spraying of Weedicides and pesticides

Pump action sprayer – Inhalation – ingestion – absorption

##### Chemical Spill – Controlled or uncontrolled

Spilling chemical whilst decanting

##### Ergonomics & Manual Handling

Repetitive movements. Lifting of containers to max 20 kG

##### Physical environment

Slips, trip, falls at same level, snakes and vermin when working in windbreak.

#### PPE

Eye protection

Long sleeves and trousers

Gloves

Closed footwear

Mask optional depending on prevailing conditions

#### Potentially Hazardous Chemicals

Glyphosphate – Roundup – Weedicide

Fusillade – Selective weedicide

Confidor – Systemic domestic pesticide

Rat Bait

#### Pre Operation

- 1) Assess the current site risk

- 2) Are you fit and healthy for the task? Take regular breaks, remain hydrated during the task
- 3) Check PPE
  - Gloves
  - Eye protection
  - Wrist to ankle clothing
  - Enclosed footwear
  - Sun protection
- 4) Inspect equipment
- 5) Ensure work area clean and tidy
- 6) Inform people to stay away from spraying operation

## Operation

### Application

#### Decant chemical and dilute

- PPE – Gloves – Eye protection
- Open air
- Only mix the required amount for the job

#### Apply Chemical to the area required

#### *Spraying*

##### Control measures

- PPE
- Do not spray in windy conditions
- Avoid overspray of edible crops

#### *Direct Application (Cut and Paste and Long term poison jar)*

##### Control measures

- PPE
- Use only minimum quantities

#### Completion of Work

- Depressurise equipment
- Flush equipment as required. Do not flush into waterways.
- Pack away equipment
- Notify MCG of area sprayed and any residual poison jars in the windbreak

#### Waste Disposal

- Mix only the required amount
- Do not discard into waterways or ground

#### Emergency Procedure

- First Aid in the Lunch Shed
- Poison Information Centre Hotline 131126

### Incident Reporting

- All accidents or incidents to be reported to the Garden Manager. Notify ANU of significant accidents or incidents within 48 hours
- Any significant spillage (5 litres or more) of chemical is to be notified to ANU immediately.

### Nominated Operators

Spraying and Direct Application will be undertake by the following MCG members only:

Harley Delves

Don Davidson

Sybille Davidson

Barbara White

## SWP 2 – Use of Machinery

### Definition

The term Machinery here includes:

- Ride on Lawnmower Motor driven
- Ride on Lawnmower Battery Driven
- Push motor mower
- Whipper Snipper (Brush Cutter)
- Motor driven Mulcher
- Chainsaw

Electrical tools are described elsewhere.

### Top Residual Risk

**Medium.** An event is unlikely. An event could result in hospitalization

### Hazards Identified and Alleviation

#### Fire Explosion

These items of machinery are mainly petrol driven.

Take care refueling.

- Do Not refuel a hot engine
- Refuelling to be conducted in the open air
- No smoking or other sources of ignition in the vicinity of fuelling operation
- Avoid spills of fuel. If one occurs mop up and do not start machine until all liquid fuel has gone. Dispose of cleaning material safely.

#### Hearing Damage

Wear Ear defenders to avoid damage from engine noise.

Keep bystanders away from the operation.



### Eyesight Damage

Eyes can be damaged from flying objects such as stones or twigs etc. Wear safety goggles or substantial eyewear eg glasses. A face shield when chain sawing and when cutting in the windbreak.

Keep bystanders away from the operation.

### Bodily Injury

The machinery used is designed to cut or shred vegetation. It can do the same to people.

Only an operator familiar with the machine is to use the machine.

Ensure machine is in good condition and safety devices and guards are present and operable.

Take care where you point the business end of the machine

Keep hands, feet and limbs well away from the cutting components

Wear substantial closed footwear and gloves where necessary.

No loose clothing is to be near machinery. Sleeves rolled or buttoned securely.

When operating a chainsaw there is to be a safety observer watching the operation.

### Trips and Falls

Injury can result from a trip or fall while operating machinery. Check the site before starting work. Be careful where you put your feet especially if working in the windbreak

### Dehydration exhaustion

Don't operate machinery if you are tired or unwell or are on medication.

When working on a hot day ensure that you remain hydrated and wear sun protection.

## Specific Provisions

### Ride on Mower

This is an owner operated machine and is brought on site as required.

The owner only is to operate the machine.

The owner is to hold membership of the MCG for insurance purposes.

### Battery Powered Ride on Mower

TBA when the machine is purchased.

Only authorised MCG operators will operate it.

### Chainsaws

Chainsaw operations are an infrequent operation and each operation is to be authorised by the Garden Manager

Chainsaw operations will be conducted by an owner operator.

There is to be a safety person present at all chainsaw operations.

### Mulcher

Mulching operations are to be approved by the Garden Manager.  
The machine is to be operated by an owner operator.

### MCG owned Lawnmower and Whipper Snipper

These machines are to be used by MCG members who are familiar with the machine and its usage.

### Before Work

Operator able to use the machine safely.  
Check site for hazards  
Check machine  
Check and use appropriate PPE.

### After Work

Clean down machine and put it away  
Report any defects to the Garden Manager

## SWP 3 – Working with Heavy or Difficult Objects

### Definition

This Plan covers:

- Lifting or moving of heavy objects at the same level or from shallow holes
- Lifting of all objects overhead

A “heavy object” is a subjective term. Anything weighing more than 16kG should be considered a heavy object at the MCG. For example a full 20 litre bucket of water weighs 20 kG. A bag of cement weighs about 40 kg

### Top Residual Risk

Medium. An event is possible. An event could result in medical treatment.

### Hazards Identified and Alleviation

#### Bodily Strain

When lifting a heavy object single handed; eg a bag of cement or bucket of water.

- Do not lift and twist your back at the same time.
- Lift using your legs rather than back.
- Check the site for trips or potholes
- Move slowly
- If in doubt get assistance.

When digging out a tree stump or root.

- Use physical aids such as a crowbar and spade.
- Use your legs not your back
- Get assistance if the task is hard.

#### Crush and Impact Injury

Fingers and toes can get damaged by being caught between an object and a hard place.

- Wear appropriate enclosed footwear with toe cap protection.
- Watch where you put toes and fingers
- Ensure tools used are in good condition.
- Do not put yourself between a heavy object and a hard place

#### Trips and Falls

Check the work area for potential trips and uneven ground before starting the operation.

## Overhead Lifting

**At the MGG any lifting of heavy objects overhead will not normally be undertaken.** The only foreseeable exception would be the placement of, say a power pole or the erection of a building in which case specific authorisation will apply.

## Before Work

Is the job necessary?

For significant tasks the Team Leader is to

- Assess what has to be done
- Brief each person as to their role in the operation and any risks perceived.
- Ensure the provision of any mechanical aids required.
- Ensure team members are appropriately dressed for the task.

## During Work

Watch for hazards.

If something slips, do not try to stop it. Stand back

## After Work

Ensure the site is safe and that all objects are properly secured.

Return tools.