



Westhill Men's Shed Workshop Operations Manual

This version is reduced in detail from the Westhill Shed manual- it has all the main points in it but to avoid blind copying of the content without carefully considering your own circumstances the detail will have to be recreated. For example a different brand of machine will have its own hazards to consider, we have workshop safety supervisors with many years' experience in the oil industry so our machines are maintained to a high standard etc.

We are concerned about this and advise that you make your own mind up about the validity of our approach and take more advice if necessary.

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Introduction

This manual describes how Westhill Men's Shed manages the safety and operations of the workshop. The procedures and methods are described and the manual should be updated whenever anything changes in the workshop and particularly if a new machine is introduced. Regular checking of the condition of the machines is necessary and management of projects ensures that one person is responsible for progressing and completing each project- for these reasons this manual, or control sheets from this manual must be consulted regularly.

Accepting new members

The shed runs several levels of attendance. These are managed at the front desk but of concern here is that the 'Welcome form' has been completed along with a safety brief for new members and that a 'Workshop induction' has been completed. The latter ensures that the user has been shown the workshop and had the PPE and general safety plan explained.

Workshop procedures

Before using any machines a user must be checked out on them by a supervisor who is competent at that machine. This is recorded on the Workshop induction sheet for the individual and any other supervisor can check then onto a machine without having to be competent at that machine themselves.

If the user is new to that machine this will consist of a training session followed by observation-checking that the user is using the machine safely.

An experienced user would be asked to describe how to use the machine and what safety precautions should be taken- followed by observation that the machine is being used safely.

The need to check the machine before use and report any problems should be emphasised, as should the requirement to clean up after yourself and leave the workshop as you would expect to find it.

Accidents:

- **Ensure you are safe and the accident will not be compounded with another injury**
- **Deal with the problem**
- **Fill in the accident book and report to the chairman (or any board member)**

Safety sign- on door as you walk into workshop:

Westhill Men's Shed is **committed** to providing a safe working environment.

But we need you to continue this into **safe working practices**.

SAFETY IS YOUR RESPONSIBILITY

Before using the Workshop you must have registered with the Safety Supervisor who will check that you have been approved as competent in the tools you are going to use.

Use the Personal Protective Equipment necessary for your activity.

It is your responsibility to make sure you are working safely and not endangering anyone else.

Check tools and machinery before you start.

Are they in good order? Nothing loose or broken? All the guards in place?

Westhill and district Men's Shed

Machine Safety and Maintenance Checks

Supervisors meeting to discuss and solve issues followed by a check that the workshop is clean and tidy, fire exits are clear and the fixed wiring is in sound condition. Then use the checklist, Appendix 4, to check and maintain machines.

Project Management

We accept jobs from Shed members, the public and other organisations. These projects can be to build from scratch or to repair items.

These jobs are discussed as they come in to see whether we think we are competent to work on them, we also make it clear that there are no guarantees that we will find someone willing to work on it or that it will work afterwards. That said it generally works out.

The costs will be borne by the person wanting the job done and we should be careful to get agreement to expenditure before it is made or ideally ask them to make the purchase. When the project is complete the costs should be settled and any donation accepted.

The process of estimating a price is:

Cost of materials

PLUS

An estimate of how many hours it will take and at £10 an hour this prices the work, not actually as payment for the work but as a contribution to overheads (wear and tear on tools, heating and electricity and shed running costs)

We then adjust on ability to pay. While all shed projects are only undertaken if we approve of the recipient a school would be asked to the full price plus donation while an elderly resident would just be asked for costs plus donation. The mechanism of producing the price is not usually discussed with the customer.

The record form is in Appendix 3, Workshop Project Record, these should be hung in the workshop and referred to before working on any project- getting the agreement of the project leader.

As we don't have a full time supervisor to provide continuity this ensures that materials don't get used for the 'wrong' purpose and a project is coordinated.

As new projects are bought in please make an entry on the sheet.

Safety signs at each power tool

For each fixed power tool the hazards have been assessed, risks reduced through safety precautions and a procedure written to use the machine safely.

Appendix 1 has the forms that must be displayed near each tool.

There is a common format for each tool (hand tools, lathe, band saw etc.). This ensures that everything is covered consistently among the tools and by different people doing the assessment.

RISK ASSESSMENT PROCESS

STEP 1 - Spot the Hazard

The first step is to walk around your Shed and find the obvious things that could put the health or safety of anyone in your workplace in danger.

A hazard is anything that has the potential to cause injury, illness or damage to your health.

Some of the hazards you will be able to fix straight away by picking up a lead that may cause someone to trip, cleaning up a spill on the floor or moving a frequently used item onto a lower shelf. There are a number of other ways to find hazards in your workplace, including:

Look at the tasks

Look at each task members do. Look for any hazards associated with these tasks

Talk to the members

The people who do the job regularly are the best people to tell you about any hazards associated with their work. Ask members which tasks cause problems or make them concerned. Supervisors may also have had reports from members about particular tasks they've had problems with, but not passed on.

Use safety checklists

The safety checklists starting on page 28 will help you identify some of the common hazards that can be found in workplaces like yours. Please note that these checklists are generic and should be adapted to suit your own workplace.

Review manufacturers' information

Review the information available from designers or manufacturers, including material safety data sheets (MSDS) and product labels. Examples of MSDS forms are in the Appendices.

Check injury records and incident reports

By looking at your injury records, you'll be able to get a good idea of what's causing your members' injuries. You should also check your register of health and safety problems and records of near-misses.

A more systematic approach is as follows:-

Use a risk assessment sheet like the one in the Appendices. Under the 'Spot the hazard' column, write down the name of the task you're reviewing in the 'Identify the work task or activity' column. You may even want to break down each of these work tasks into the steps involved in it, from start to end. If you decide to do this, identify all the steps involved by asking "What happens first?" and then "What do you do next?". In the "What are the hazards associated with each activity" column, write down all the hazards you can find. The Risk Analysis Thinking Prompts in the Appendices can help assess the activity.

STEP 2 - Assess the Risk

When the hazards are identified, the level of risk needs to be established.

A risk is the likelihood of a hazard causing injury, illness or damage to your health.

$$\text{Risk} = \text{Potential Impact} \times \text{Exposure}$$

So a hazard that would require first aid treatment that is possible at any time becomes a Significant Risk. While one that would require medical attention but the exposure can be avoided becomes a Low Risk

The list of hazards may be surprisingly long, with some hazards posing more safety risks than others. It is necessary to work out which hazards are more serious than others, so that they can be dealt with first.

To assess the risk associated with each hazard, ask these questions:

What is the potential impact of the hazard?

- How severe could an injury or illness be?
- What is the worst possible damage the hazard could cause to someone’s health?
- Would it require simple first aid only? Or cause permanent ill health or disability? Or could it kill?

How likely is the hazard to cause someone harm?

- Could it happen at any time or would it be a rare event?
- How frequently are workers exposed to the hazard?

Answering these questions will help you assess the risk level of the hazard: whether it is a low risk, moderate risk, significant risk or high risk. The table below can help with this process.

Potential Impact	Exposure				
	Almost Certain	Likely	Moderate	Unlikely	Rare
Insignificant	Significant	Moderate	Low	Low	Low
Minor	Significant	Significant	Moderate	Low	Low
Moderate	High	Significant	Significant	Moderate	Moderate
Major	High	High	High	Significant	Significant
Catastrophic	High	High	High	High	Significant

Description of Potential impact of Hazard

Insignificant- No injuries, low financial loss

Minor- Simple First aid treatment, medium financial loss.

Moderate -Significant First aid treatment, high financial loss.

Major- Extensive injuries, loss of production capability, major financial loss

Catastrophic- Death, huge financial loss.

Description of Exposure levels of the Hazard

Almost certain- The event is expected to occur in most circumstances.

Likely -The event will probably occur in most circumstances

Moderate -The event should occur at some time.

Unlikely -The event could occur at some time.

Rare -The event may occur only in exceptional circumstances.

Action required to eliminate the Risk

High -High Risk - act immediately to take steps to Fix the Problem.

Significant- Significant risk - act immediately to take steps to Fix the Problem

Moderate- Moderate risk - act as soon as practicable

Low -Low risk - manage by routine procedures and reassess within designated timeframe.

STEP 3 - Fix the Problem

When the hazards are spotted and their risk assessed, ways need to be developed to fix them. This is known as risk control, and is the third SAFE step.

You should always aim to remove a hazard completely from your workplace. Where this isn't practical, you should work through the other alternatives systematically. Working through hazards in this way is known as the hierarchy of control. Sometimes more than one control measure should be used to reduce the exposure to hazards.

Control Measures

1. **Eliminate the hazard.** For example, repair damaged equipment; use a lifting machine to do the lifting in the workplace; stop using a dangerous chemical.

If this is not practical, then:

2. **Substitute the hazard with a safer alternative.** For example, break larger loads down into smaller, lighter loads; use a less toxic chemical.

If this is not practical, then:

3. **Isolate the hazard.** For example, install barriers to restrict access to hazardous work areas or machines; use chemicals in a safe dedicated work area.

If this is not practical, then:

4. **Use engineering controls.** For example, place guards on dangerous parts of machinery; use a trolley to move heavy loads; explore use of localized extraction systems.

If this is not practical, then:

5 **Use administrative controls.** For example: have clear safety notices on machines; change work practices and organization; rotate jobs to reduce the time spent on any single task; train members in safe work procedures; carry out routine maintenance of equipment.

If this is not practical, then:

6. **Use personal protective equipment (PPE).** For example, provide workers with protective equipment such as gloves, masks or ear muffs and train them to use PPE correctly.

Finding safety solutions

- There are many ways to find safety solutions.
- Ask members for their ideas. They may already see safer ways to do things.
- Look at the information available from designers or manufacturers, including material safety data sheets (MSDS) and product labels.
- Talk to other Sheds. Get help from any associations or groups involved in similar functions. They may have seen the problem before and know how to fix it.
- Consult a professional OHS specialist
- Talk to a Workplace Standards inspector.

STEP 4 - Evaluate Results

Risk Management is not a one-off event - it is an ongoing process. Once you've identified the hazards, assessed their risk and fixed them, you need to follow up with the fourth step of the risk management process 'Evaluate results'.

Evaluation is an important step in the risk management process. After you think that you've fixed the problem, find out whether the changes have been effective.

It is useful to think through the SAFE steps again to ensure no new risks have arisen.

Talk to your members. Ask these questions:

- Are the changes making a difference to work?

- What do your members think?
- Will the solutions reduce risks and prevent injury or illness in your workplace?
- Do they create new hazards or increase the risk of existing ones?
- Any ways to make further improvement?

Set a date to re-evaluate the task, choosing a timeframe appropriate to the task and the risk involved.

Appendix 1: Safety Summary signs

There follows a page per mains powered machine in a common format with Hazards, Safety and a simple procedure which concentrates on using the machine safely. One of these sheets must be displayed near each tool. There is also a sheet for dealing with hazardous fluids.

Each page asks that the user checks with a supervisor before using the machine. This is easy to miss but should be kept to as there may be a reason why a machine cannot be used that day. Hopefully it will have a “Do not use- faulty equipment” sign on it if this is the case. If it does not then put one on and note the defect in in the book for repair.

Two samples are given here...

Hazardous fluids

Flammable, caustic, solvents- paint cleaning materials etc.

Hazards:

Irritants	Fire
Fumes	Explosion
Poison	

Safety:

- Keep in appropriate containers
- Keep them inside red cupboard
- NEVER mix fluids
- Use PPE, gloves/ breathing
- Read Safety Data Sheets and on container

Procedure:

Decant the fluid into a suitable container (consider if the material of the container is suitable) for use and NEVER mix fluids or return contaminated fluid to the original container.

Metal bins are provided for contaminated materials (rags etc.)- keep the lid on to starve a fire of oxygen. For larger quantities of fluid dispose of correctly.

Return all fluids to Red cupboard and doors to be closed at end of session

Read the Safety Data Sheets (kept next to the cupboard) and advice on the container before using.

Note well- two part glues and wood filler to be kept elsewhere.

Drill Press

CHECK IN WITH SUPERVISOR BEFORE USING THIS MACHINE

Hazards:

Shavings in Eyes.
Clothes/hair caught in machine.
Chuck key left in - can throw out
when machine starts
Drill jams and rotates work piece

Safety:

NO LOOSE CLOTHING
LONG HAIR UNDER CONTROL
Wear EYE PROTECTION
Keep HANDS away from drill bit.
Clamp down work piece

Procedure:

Lock drill bit in chuck using chuck key.
Good practice: when you pick up the chuck key it does not leave your hand until back in its storage position.

Locate drill bit over target mark. If possible clamp down the work.
Turn on machine - wait for full speed.
Using manual lowering arm, move drill through material, backing off to clear swarf if necessary.
Do not move material during the drilling operation.
Lift drill to its rest position, turn off & wait until rotation of the bit stops.
Remove work piece & clean up

Appendix 3: Workshop Project Record

If you want to work on a project please get the agreement of the lead person.

Item	Who From Name, Tel, address.	Date in	Work needed and notes	Lead person	Costs £	Paid? Tick

Appendix 4: Machine Safety and Maintenance checks

Supervisors should check over each machine, the electrical system and the overall workshop for defects, loose parts, guards not in place each month and initial the box.

Year:

Tool	Coordinator	J	F	M	A	M	J	J	A	S	O	N	D
Drill Press													
Kity													
Fretsaw													
Sliding mitre													
Bench Grinder													
Morticer													
Dust Collector													
Band Saw													
Wood Lathe													
Metal Lathe													
Electrical installation	Cut offs tested- wiring sound Nick												
Workshop overview	Tidy? Trip hazards, Installations sound?, fire doors clear and working, fire extinguisher check.												
Test fire alarm	Open 'break glass' unit by front door, press the test button, check both bells working, close up.												