

RISK INFORMATION – SCHOOLS

SCHOOL GROUNDS MAINTENANCE

The Risk Information contained in this paper is intended to assist schools in establishing safe procedures for maintaining school grounds.

Schools owe a duty of care to employees and students to keep them safe. Extra vigilance is required to satisfy this duty when hazardous equipment is involved in an activity.

Schools have a responsibility to manage plant and machinery in a safe manner. Plant is a general name for machinery, tools, appliances and equipment. It can include items as diverse as bench saws, electric drills, tractors and mowers. Much of this plant and machinery is hazardous or potentially hazardous. Further examples are included at the end of this document.

The induction process for all new maintenance staff should include familiarisation with the equipment that they will be using and should ensure that appropriate training is provided or scheduled before they begin using equipment for the first time.

For all powered equipment, the following standard actions should be undertaken:

- A risk assessment should be undertaken for each item (or type) of equipment taking into account the likely locale and scope of operation of the equipment.
- For each type of equipment, develop and publish Safety Operating Procedures (SOPs) that outline the preferred and safest method of using that equipment in a standardised manner. Components of SOPs include:
 - The purpose of using the equipment
 - Relevant legislation or standards
 - Specific information about potential hazards and risks
 - Precautions required to eliminate or greatly reduce risks
 - Personal Protective Equipment (PPE) to wear while operating the machinery
 - Environment where the equipment should be used
 - Clear and simple instructions on how to operate the equipment safely
 - Clean-up, waste disposal and environmental measures
 - Emergency procedures and shutdown

Further information and examples of completed SOPs are contained in References, below.

- Before any equipment is used for the first time (or if it has not been used for a prolonged period of time), make sure that the operator is trained in the safe operation of the equipment (based on SOPs). Normally this will include instruction by an experienced person, competent in the use of the equipment concerned. For some equipment types specific licences are required, e.g. tractors and forklifts.

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- All equipment should be regularly maintained to the manufacturer's standard. Records should be kept of the maintenance history of each item.
- Prior to use, each equipment item should be manually inspected following guidelines outlined in the SOP. The visual inspection serves to identify any obvious deficiency such as missing or loose components.
- Do not remove any standard guards / maintain safety features, cut-off switches etc.
- When not in use, equipment should be secured so that it cannot be used by unauthorised operators or cause injury to students or staff who might chance upon it.
- Equipment must be registered where required by state government legislation or regulation.

Care needs to be taken when undertaking tasks that do not involve use of plant and equipment, such as erecting sports equipment, marking grounds etc. Undertake activity risk assessments for all new tasks and prepare SOPs for all recurring tasks.

Where required by SOPs, Personal Protective Equipment use is compulsory.

Ensure staff members are protected from the risk of sunburn by the provision of appropriate hats, clothing and sunscreen.

When operating equipment, establish pedestrian and traffic exclusion zones to minimise the risk of injury and/or damage; at times of heavy pedestrian movement, restrict the operation of plant.

If maintenance work is carried out on or adjacent to public roads then Traffic Management practices need to be implemented including signage, protective/reflective clothing and "witches hats". State road authorities require personnel engaged in Traffic Management to be appropriately trained. Refer to your local state roads authority for training requirements; References below include details of a VicRoads publication that explains one state's requirements in this area.

Consider the use of audible/flashing warning systems for moving plant.

Where equipment is noisy, ensure that appropriate audiometric testing has been undertaken to measure noise levels in typical operating environments. Where noise levels are excessive (refer to the Victorian WorkSafe publication in References below), changes to operating conditions including provision of PPE may be ways of managing noise exposure.

Access to workshops containing plant, equipment and tools must be restricted to only authorised personnel. Measures must discourage curious school children.

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Dangerous materials (including: insecticides, pesticides, chemicals, gases, petrol, diesel & lubricants) must be securely stored. Appropriate Material Safety Data Sheets must be available for all such material to guide handling and usage of such materials.

In bushfire prone areas, make sure that a Bushfire Survival Plan has been prepared for the facility and that it is understood by all workers. Remain aware of prevailing conditions and be prepared to act in accordance with the plan.

Equipment users must be appropriately licenced. This will include when driving on public roads where state licencing is required. Off-road driving may have different requirements; refer to the relevant state licensing authority. Some types of High Risk work require WorkSafe / WorkCover (etc.) licencing (e.g. forklifts, cranes, rigging, hoists). Check with your local authority whether this form of licencing is required.

Some other specific risks to be aware of and to take into account when undertaking risk assessments:

- Power take-offs on tractors or similar equipment can cause serious injury or death if care is not taken
- Risk of roll-over using tractors and quad bikes
- Leaking or burst hydraulic lines
- Hand-arm vibration syndrome arising from continued use of vibrating equipment
- Legionella infection from inhaling mulch or potting mix particles
- Poisoning from wrong use of chemicals
- Risk of bites / stings / cuts and grazes
- Risk of drowning where pools or dams are part of the facility
- Manual handling
- Slips, trips and falls
- Working at heights

Examples of powered maintenance equipment which might be used in your facility:

- Tractors
- Lawnmowers – push, walk behind, electric, ride-on
- Rollers / cultivators
- Slashers
- Forklifts
- Quad bikes
- Chainsaws
- Edgers

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- Line trimmers / brush cutters
- Mulchers / chippers
- Blowers / vacuums
- Hedge trimmers and loppers
- Bench saws / grinders /power drills
- Welding equipment
- Cherry pickers and elevated work platforms

The information provided is of a general nature only and may not identify all matters that need to be included in the design of effective controls for the subject area. Professional advice should be obtained on individual circumstances.

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References

University of South Australia, “Safe Operating Procedure Development”
<http://w3.unisa.edu.au/ohsw/procedures/docs/safeoperating.pdf>

SA Department for Education and Child Development, example SOPs are available from:
<http://www.decd.sa.gov.au/hrhealthsafety/default.asp?id=41574&navgrp=3961>

Queensland Department of Education, Training and Employment, “Safety Operating Procedure for a Ride-on Mower”,
https://www.google.com.au/?gws_rd=cr&ei=tw1eUtbhMdDDkAXG2YHQAaw#q=safety+operating+procedures+lawn+mower

WorkCover Tasmania, “Safety Operating Procedure for Chainsaw – Petrol Operated”,
https://www.google.com.au/?gws_rd=cr&ei=tw1eUtbhMdDDkAXG2YHQAaw#q=safety+operating+procedures+chainsaw

WorkSafe Victoria, “Guide for Assessing and Fixing Noise Problems at Work”
<http://www.worksafe.vic.gov.au/forms-and-publications/forms-and-publications/?a=22683>

VicRoads, “Guidelines for Traffic Controllers”,
<http://www.vicroads.vic.gov.au/NR/rdonlyres/813F313B-C645-4B1D-B3E9-F76F33D90FFD/0/VRPIN008901.pdf>