Working safely near overhead electric power lines

Workers who operate horticultural mobile elevating work platforms (H/MEWPs) in orchards, or other horticulture workplaces, are at significant risk of accidental contact with overhead power lines.

KEY POINTS

- > Always complete a risk assessment to identify any overhead powerlines in the work area before beginning work.
- In your risk assessment outline how you're going to ensure that no machinery, people or equipment come within 4 m of any overhead power lines or 6 m of transmission lines. These distances must be observed by persons using H/MEWPs.
- > Eliminate any risks arising from working near overhead power lines. If you cannot eliminate a risk then you must put controls in place to minimise it.
- Regularly review your property's risk plan for working near overhead power lines.

DANGERS OF WORKING NEAR OVERHEAD POWER LINES

The risk of accidental contact with live overhead power lines by workers operating H/MEWPs is significant in orchards and other horticultural workplaces. There is also a significant risk

KEEP SAFE, KEEP FARMING



when working near transmission lines. Transmission lines are high voltage lines which transport electrical power over long distances (from power plants to substations).

There have been several incidents where H/MEWPs have come into contact with live power lines resulting in serious injury and death.

You must avoid any machinery, people or equipment coming within the 'safe distances'. As set out in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001), this is within 4 m of overhead power lines. For overhead transmission lines, the recommendation is to allow a distance of 6 m.

The safe distances for working near power lines or transmission lines are established in **NZECP 34:2001** available at www.energysafety.govt.nz

MANAGING THE RISK

Before work starts identify all overhead power lines in your work area as part of your risk assessment. You must take steps to eliminate





or minimise the risks when working near overhead power lines, so far as is reasonably practicable.

Orchard and horticulture workplaces should think about what they plant near overhead power lines that may grow into the safe distances around the power lines in the future.

STAYING OUTSIDE THE SAFE DISTANCES

At no time should any H/MEWP, person or piece of equipment come within the safe distances. This is in any direction – from under, above or either side.

If you do need to work within the safe distance zone near an overhead power line, then you must first consult with the line owner. If you are the line owner then you will need to seek technical advice, for example from the local network owner. You should also consider contracting a line mechanic or utility arborist who is qualified to work near overhead electric powerlines to carry out the work.

WORK PROCEDURES

If you are operating an H/MEWP near live overhead power lines, then you need to have controls in place to ensure that any machine, person or equipment does not come within the safe distances of any overhead power lines.



Below are some examples of controls you could put in place:

- > Where any H/MEWP is operating near an overhead power line, the owner or operator places a warning sign in plain view which states: 'WARNING, KEEP CLEAR OF POWER LINES'.
- Ensure that H/MEWP operators are competent in the operation of their machines, thoroughly briefed and understand the dangers of working near overhead power lines.
- Ensure that a competent safety observer is present at all times. A competent safety observer can be defined as a person who watches the H/MEWP to identify and warn the operator if they are getting too close to the safe distance zone or about any other hazards.
- Ensure that the safety observer is able to maintain effective communication with the operators and alert operators or any other workers immediately if they, or any piece of machinery or equipment, are about to enter the safe distance zone. This should be the safety observer's sole task.
- > Safety observers should remain clear of the H/MEWP at all times and outside of the safe distance zone.
- > To avoid distractions, the competent H/MEWP operators should not use cell phones or any electronic equipment, or wear clothing which could impede their vision or movement while working in the defined area.
- > The competent operators working near overhead power lines should obey any instructions given by the safety observer.

For further information on working near overhead electric power lines visit the WorkSafe website: www.worksafe.govt.nz

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