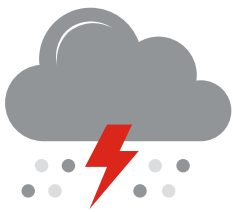# Growing a culture of safety

vero

Reducing risks in your orchard

Orchards are the source of some of New Zealand's favourite fruits, which are loved here and around the world. We know there's a lot more to running a successful orchard than waiting for fruit to grow, and managing risks is one of them.

To help with this we've compiled a list of things to look out for and ways to mitigate damage to help you keep your business flourishing.

Weather watch outs

When it comes to weather and buildings the key is "keep it out". Important buildings and valuable processing plant inside can be damaged by wild weather events which are on the increase nowadays. Here are some tips to help keep them safe.
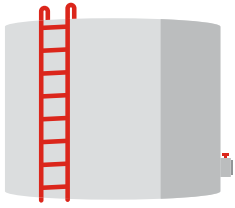
Best practice

- Create an emergency plan to follow in the event of wild weather – and make sure everyone knows what to do.

- Keep drainage systems around the property clear of fallen trees, logs and other debris that might block the flow of water away from the property. These should be checked regularly but going into winter months and again in spring would be ideal.

- Fuel tanks should be strengthened to prevent them toppling over and if possible kept within a bund to avoid polluting water ways.

Must haves

✔ Regularly check buildings for weak spots such as skylights, canopies, guttering/downspouts and other infrastructure to make sure of weathertightness, preventative maintenance needs and repairs that might be required.

✔ Tie down plant, equipment and stock that could be affected by strong winds.

✔ Where flooding is likely move vulnerable equipment and produce i.e. picked fruit and veges to higher levels if possible. If this isn't possible, consider using barricades and sandbags to help divert water away. More permanent flood protection could be considered.

SUNCORP

PART OF SUNCORP
NEW ZEALAND

Tapping into Water Sources

If you're in a rural area it's important to consider your water sources and how easy it would be for the Fire Service to access and use them.

Best practice

- Check that the Fire Brigade can easily access critical areas of your site. Narrow roads and obstructions could cause delays getting to the fire, especially if they are bringing water trucks.

- Make sure fire hydrants or fire service connections on water tanks/bore supplies are clearly marked and easy to access. If possible ensure waterways are accessible for fire fighters.

- Talk to your local FENZ Fire Station Commander about a fire plan if you don't have one already. Invite the local Fire Service to visit the orchard, this will allow them to familiarise themselves with the site.

Putting out the fire risk

There is always a fire risk on an orchard as buildings can contain combustible materials, and machinery and electricity can be a source of ignition.
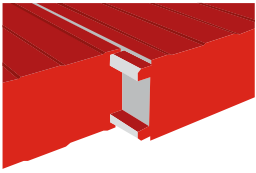
Best practice

- Install a monitored fire detection system that's fitted with smoke and heat detectors. Choose a detector unit that is suitable for the environmental conditions on your site to avoid false alarms.

- Consider fire sprinklers in large industrial buildings as these can extinguish fires and limit any damage to expensive plant and stock.

- Separate combustible materials such as timber pallets, fruit crates, and packaging from ignition sources like heaters, electrical switchboards and lighting.

- Familarise all staff with the site Emergency and Evacuation Plan, and trained in how to use the fire extinguishers on site.

Must haves

- ✔ Invest in the right number of fire extinguishers and place them at key locations. Consider higher risk areas such as electrical plant rooms, electrical switchboards, near plant and equipment or other heat sources.

- ✔ Have proper procedures in place for 'hot work' such as welding grinding or open fires. These include having a fire watch, designated welding areas or welding curtains and stopping welding an hour before close.

- ✔ Keep all electrical equipment clean and free of dust and other combustible build-up. Ensure all electrical equipment, switchboards and controllers are regularly inspected and maintained by a certified electrician.

Keeping cool with sandwich panels and combustible insulation

Expanded polystyrene sandwich panels and sprayed polyurethane insulation are combustible and are a large fuel source.

Best practice

- Encapsulate (or remove) sprayed on polyurethane foam insulation.

Must haves

- ✓ Ensure polystyrene sandwich panels are in good condition and that no inner core is exposed. Any exposed material or penetrations through the material needs to be re-clad or covered to prevent rapid fire spread.

- ✓ Keep ignition sources such as such as electric battery chargers, electric lighting and other heat generating equipment clear of sandwich panels or polyurethane foam insulation.

Keeping things secure

Making your site secure and keeping an eye open for any break-in opportunities means you can lower your risk of theft. Most orchards have some high-value product and materials on site, so it's worth doing all you can to control unauthorised access.

Best practice

- Consider installing a monitored intruder alarm to key buildings with a security patrolled response or, if you're a little too remote, this could be self-monitored in conjunction with regular inspections of the property.

- Invest in a CCTV system which records and monitors activity on site to help track transport operators and other visitors. Modern systems are high resolution, offer infrared for low light situations and are relatively low-cost. Monitoring can be through a professional monitoring company or be as simple as a mobile phone app.

- Remove keys from vehicles such as fork-lifts after hours and keep these locked away in a safe place.

- Make sure any indoor spaces that contain high value products are in a secure area.

- Develop a lock-up routine when you leave, making sure all doors, windows, gates and padlocks are secured.

Must haves

- ✓ Invest in good quality fencing for any yards and make sure any entry/exit gates are secured with closed shackle padlocks.

- ✓ Install good perimeter and yard security lighting around entry doors and yard spaces.

Clear signage and smart storage

Hazardous substances need to be stored and handled safely, and it's important to have clear signage in order to meet MPI and Worksafe requirements.

Best practice

- House all flammable gases outside the buildings and within secured caged enclosures if possible. Limit quantities permitted inside to the barest minimum.

- Display signage at all entry gates to the premises to indicate the presence of hazardous products such as gas bottles, cleaning chemicals, fuels, and oils for example.

Must haves

✓ Make sure all hazardous substances are stored appropriately in fit for purpose dangerous goods bunkers or cabinets well away from product storage or processing areas. These storage areas should be well signposted.

✓ Familarise yourself with the regulations and Worksafe requirements around hazardous goods use and storage. Further information can be obtained from the Worksafe website (worksafe.govt.nz/topic-and-industry/hazardous-substances).

✓ If you're in any doubt, think about getting professional advice from a Hazardous Goods Inspector. They can also help you ensure you are meeting the most up-to-date compliance requirements within the latest legislation.

Good housekeeping

Keeping the orchard and buildings on site neat and tidy is an important part of minimising risk. Not only the fire risk but the natural disaster risk as well. Flooding and vegetation fires are becoming more frequent and severe.

Best practice

- Check that water drainage is unobstructed by clearing gutters, channel drains and yard sumps (especially around large trees).

- Maintain the integrity of firewalls and doors. Penetrations and fixings through fire walls should not affect the fire rating of the wall or door. Repairs should be professionally undertaken. Fire doors should be able to close freely and should be clear of obstruction.

- Brace storage racks and packing systems to prevent collapse especially if you are in an area with a higher earthquake risk.

- Clean-up daily around all mechanical plant and machinery. Special attention is required for dust extraction cyclones, clean regularly and remove any waste.

- Check for bird nests in machinery and tractors before starting-up.

- Consider introducing strict smoking controls for the site or making it a smoke-free site to reduce the risk of fire. If smoking is allowed have designated areas and a safe way for smoking materials to be disposed of.

Good housekeeping (continued)

- Keep areas within 10m of buildings free of long grass and other vegetation that could be affected by an out of control scrub fire. Create fire breaks around orchards if there are nearby stands of vegetation within 30m by removing dead or dying trees, keeping large trees pruned, removing low branches and keeping grass short.

Must haves

✓ **Keep all electrical equipment clean and free of dust and other combustible build-up. Ensure all electrical equipment, switchboards and controllers are regularly inspected and maintained by a certified electrician.**

✓ **Ensure that external waste bins/skips/cardboard disposal bins, idle timber pallets and crates are kept located away from the building. (A 10m gap from a building is considered an ideal practical distance.)**

Business interruption

Fire, mechanical breakdown, and accidents can be devastating for an orchard business. We recommend having a Risk Management Program in place to address a range of issues to keep your business working.

When the worst happens, it pays to be prepared. Develop a business recovery or contingency plan to allow you to identify and mitigate risk areas. This plan should also be a significant part of the overall Risk Management System for the site.

Best practice

- Ensure all key mechanical plant/equipment is maintained according to the manufacturer's specifications. Keep a range of critical spares on site or make sure these are readily available

when needed. Consider whether your key electrical systems are exposed to regular 'brown out' power loss conditions and whether a back-up power source such as an Uninterruptable Power Supply (UPS) or emergency generator is needed.

- Ensure all compliance documentation or operating consents are up to date and meet with current national, regional and local regulation/legislation.

- Get specialist help if you need help to develop a risk management programme, a business continuity plan or evaluate the robustness of your cyber security.

Visit **vero.co.nz/risk-profiler** to check out our other advice sheets for more tips and in-depth information about managing risk.

vero