Recycling Depots

vero

Sort out the essentials

While we're here to pay to claims if the worst happens, we're all about trying to keep you and your property safe and secure in the first place.

There's a lot going on in recycling depots. Easy to ignite materials, the risk of spontaneous combustion due to stockpiling, and criminals with their eye on high value materials.

If you're handling materials for recycling including metals, wood, textiles, plastics, paper, electronics, municipal / household waste, refuse-derived fuel and biomass, and more – here's how to navigate risk and prevent damage, loss and theft at your depot.



Keeping structures safe



The whole building should be in good structural condition.

Must haves

Doors and windows (plus locks, latches and hinges) must be sound and tightly secured to the building.

- Make sure there are no holes in fire walls and no obstructions to areas around fire doors. Fire doors must be able to close freely.
- Secure roller doors after hours. For motorised doors, lock the electric open/close switch with a PIN. For manual doors, padlock a chain to the building or door frame.



Weather watch outs



While you can't control wild weather, you can reduce the risks that come with it.

Best practice

- Be aware of what weather or flood events are likely to affect your building or business.
 This can help you plan what needs to be done.
- Keep trees and shrubbery
 well-trimmed, and remove
 diseased or damaged limbs.
 Ask a professional arborist to
 assess and strategically remove
 branches to allow wind to blow
 through the trees.
- Protect water and other pipes from freezing using insulation, or install heat tape.

 Remove snow and hail from gutters as soon as it's safe to do so. This will reduce the possibility of subsequent rain overflowing gutters.

Must haves

- Ensure the building is well maintained, that walls and roof are watertight. Make sure doors and windows are close fitting.
- Make sure gutters and down pipes are not blocked by leaves or rubbish. Check before the winter season, or more frequently if needed.
- ✓ Inspect channel drains, yard storm water outlets and sumps and make sure they are all free-flowing and that curb side gutters are not blocked by leaves and rubbish.

Vehicle impacts



Prevent exterior and interior building damage.

Must haves

✓ Install sturdy bollards to protect areas prone to impact like loading docks, parking areas, building corners and narrow driveways.

- Control the on-site movement of trucks, hoists and customer vehicles to prevent collision.
- Display maximum height signage to direct unwanted traffic away from vulnerable canopies and overhangs.

Securing your depot



Control access to the site and key areas within it.

Must haves

- ✓ You want a high fence and lockable gate that can't be lifted off the hinges. Secure gates with a close shackle padlock (available from good hardware stores) or a shielded box, to minimise any malicious damage.
- Don't leave padlocks unlocked, as someone may swap this for their own lock.
- Keep motion sensors clear of obstructions.

- Install good quality external security lighting with a daylight sensor or timers around external yard areas. Particularly where the building is in an isolated location.
- ✓ Install a monitored alarm system with a security patrol response, especially if you're storing high value materials like copper. Maintain it annually.
- Set up random security patrols for after hours.
- Put CCTV inside and out think motion sensing and infrared for image clarity in low light.
- Secure high value tools and equipment (e.g. metal analysers) during the day and after hours.

Smart cash handling



Keeping your money safe.

Must haves

Remove money from dispensing machines at night and store it in a cash rated safe, suitable for the amount of money being secured.

- Secure cash dispensing machines to the building frame and protect it with strong bollards.
- Alarm the machine inside and out and give it CCTV coverage. It should also be covered by your intruder alarm system.

Keeping it tidy



Good housekeeping includes decluttering for safety and manageability.

- Divide and contain incoming and processed recycling into manageable piles / skips / containers.
- Create aisles of at least 4.5m between piles to allow emergency vehicle access – they also act as fire breaks.

- Make storage areas accessible from at least two sides.
- Keep aisles clear. Likewise the areas around, underneath and behind machinery and electrical cabinets.
- Keep combustible recycling at least 3m away from the fence line.
- Manage stockpiles of materials prone to spontaneous heating due to chemical or biological processes, and keep them outside and away from buildings, plant and vehicles.



Managing fire risk to prevent significant loss and damage.

Best practice

- For paper and cardboard, hosereels and high volume water supplies with a hose are ideal.
- A fire sprinkler system compliant to the industry standard (NZS 4541) can both fight fire and send an alarm to firefighters.
- With sprinkler systems, take care to understand the impact of stacking heights and tidiness, as both can have an impact on how effectively the system can extinguish fire.

Must haves

Have the right amount, type and size of fire extinguishers in easily

- accessible positions, and train staff in their use. At minimum you want a 9kg dry powder extinguisher and/or 5kg CO2 unit.
- For flammable liquids, you may need a fit for purpose foam-type fire extinguisher(s).
- All systems should be maintained annually.
- Install a monitored fire detection system equipped with smoke or heat detectors in areas around the depot where appropriate. You may need building consent from the local authority to install fire detection.
- Choose the correct type of fire detector for the area, to minimise the chance of false alarms.

Dealing with hazardous substances



Managing dangerous goods.

Must haves

- Hold the correct certification for the type and quantities of hazardous goods stored.
- Handle hazardous substances appropriately and safely. For example, separate non compatible substances and limit quantities to the minimum where you can.
- ✓ While small quantities can be kept in dangerous goods cabinets, larger quantities must be stored in a Worksafe approved dangerous good store or tank.
- Comply with legislation when accepting hazardous substances for recycling processing.
- Have all the right practices in place to manage recycled lithium ion batteries and materials prone to self-heating.
- Chain gas cylinders securely in place.

Regranulating equipments



Regrinding and chopping plastic for further processing.

- Situate this equipment in a separate area — ideally a 60-minute fire rated compartment.
- Put metal detection in place so any metal can be removed before it enters the regranulator.
- Be sure that all lighting, machinery and equipment is suitable for dust-laden atmospheres.

Electrical and lighting



Carrying out electrical checks and what to do when.

Best practice

- Try not to use extension leads and powerboards. Never use if damaged.
- Install and maintain equipment according to the manufacturer's guidelines, including emergency generators (and ensure fuel storage is compliant).
- Position lights over aisles and not over stored goods in storage areas.
- Replace lamps when recommended by the manufacturer.
- Consider replacing lighting with low risk LED lights as they give you low operating temperatures and low current usage.

Must haves

- Get an electrician to conduct periodic verification (a thorough check of the entire electrical system) for older buildings and any ongoing electrical issues.
- Get regular checks by an electrician to detect elevated temperatures or overloading, including thermal imaging of switchboards.
- Tag and test portable equipment.
- Turn off high density lamps at least weekly.
- Check and replace faulty lamps like fluorescents.

Watching out for water damage



With routine checks and a proper plan, the risks can be seriously reduced.

Best practice

 Plumb washing machine and dishwasher outlets into the wastewater pipe, not simply with the waste pipe hooked over a sink.

- Know where the water shut off valve(s) are for the water supply. Where possible, shut off the water supply during extended shutdowns or when not needed e.g. over the summer holidays or in an unoccupied building.
- Ensure flexi-hoses are checked regularly and replaced if showing signs of damage – or every 10 years otherwise.

- Check shower enclosures for signs of deterioration, especially to the wall boards/tiling.
- ✓ Inspect plumbing, water pipes and waste lines for leaks, damage or corrosion. Check that all basins, tanks, etc have overflow facilities. Process tanks should be bunded.
- Check and clean the roof regularly. This is important before the winter season and after storms. Pay attention to membrane-style roof coverings as these have a limited life and can be affected by environmental exposures.
- Check flashings where the walls and roof meet, and also pipes and skylights where they penetrate the roof covering.

Forkhoist and goods-handling equipment



Good practise for goods-handling.

Must haves

- Train operators of forkhoist and goods-handling equipment in the safe use of this equipment and ensure they're licensed if needed.
- Store battery chargers for forkhoists and goods-handling equipment away from storage areas, ideally in a separate

- 60-minute fire rated room.
 The area around chargers
 should be clear of combustibles.
- Store LP gas cylinders upright and chained to prevent them from falling over. Cylinders must be stored in a location where they are protected from impact.

Management controls



Common sense and business control.

Best practice

- De-energise anything not needed as part of your daily shut down process.
- Put an impairment procedure in place if fire systems, like sprinklers, are out of commission for more than a few hours.
 This should include, notifying fire brigade and making sure activities that increase fire risk are rescheduled eg. welding

- Provide training in the use and operation of plant and equipment according to the manufacturer's guidelines.
- Educate staff in the risks working with your business, such as the handling of hazardous materials.

- Set up a permit system for hazardous work conditions like hot / cold, at height, confined spaces and so on.
- Self inspection a simple walk through all areas to see that everything is as it should be.
- Create a dedicated smoking area with the right receptacles for butts (away from other waste bin locations).
- Be sure that everyone works to certain housekeeping standards – keeping things tidy, keeping combustibles away from ignition sources, removing trip hazards and so forth.
- Check and maintain fire appliances and fire protection systems as required.
- Be sure that building, building systems, plant and equipment are maintained appropriately and where applicable according to the manufacturers guidelines.

Keep business going smoothly



Managing business interruptions.

Must haves

Back up critical data including digital records at least weekly and have them stored off site (e.g. cloud services).

- Install and regularly update computer antivirus protection.
- Keep important paper records in a fireproof box or cabinet.
- Make critical spare parts easily available for continued workflows of important equipment.

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

