

MANAGING AND MINIMISING WASTE

Waste not, want not

05

Straightforward advice to help vehicle repairers get ahead in today's business environment

Good waste storage and disposal is an essential pollution prevention measure – but did you know that reducing and recycling waste will save your business money?

While many people assume that waste is an inevitable part of running a business, the fact is that much of the waste produced in the workplace can be avoided.

Smart businesses are realising that less waste means bigger profits, as well as saving valuable natural resources and reducing pressure on landfills.

Take a good look at your business costs: what resources and wastes can you prevent or avoid? Follow the waste hierarchy in the triangle below to help you find where you can make the biggest savings.

WASTE IN THE VEHICLE REPAIR INDUSTRY

Vehicle repairers, like many other small businesses, can make large quantities of waste.

Typical waste streams consist of:

Solid waste

- broken glass, panels, car bodies, plastic bumpers
- plastic sheeting, paper, masking tape and cardboard
- oil and solvent-contaminated rags, dusting rags, dust and sandpaper
- containers with solvent and paint residues
- batteries, radiators and tyres
- metal, including used engines, catalytic converters and vehicle parts

Liquid waste

- solvents, paint and thinners
- radiator fluids, used oil, fuels, brake and transmission fluids
- washwater

You can reuse or recycle a lot of these waste products instead of putting them into your waste skip for landfill. Some ideas:

- return cardboard packaging around vehicle parts to your supplier for re-use, or recycle it
- reuse and/or recycle oil and solvents

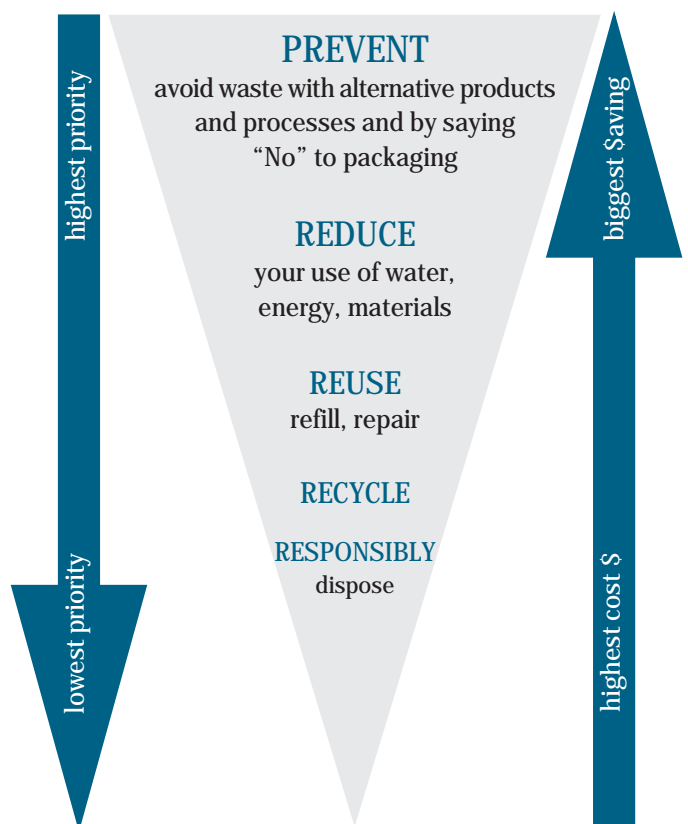
CASE STUDY: INCREASED EFFICIENCY AND REDUCED WASTE AND COSTS

A Wellington panelbeater

The changes: In the early 1990s, one Wellington firm replaced their inefficient spray guns with new HVLV guns to target paint delivery better and reduce paint use. The four new guns cost \$600 each.

The savings: The cost of paint dropped from \$4–5,000 a month to \$3–4,000 – a payback period for the guns of under 5 months. The business saved another \$40 per month by recycling used thinners instead of disposing of used thinners and buying new.

SENSIBLE WASTE MANAGEMENT – AN ORDER OF PRIORITIES



Focus your decisions about managing resources and waste on prevention as the first option, then reduction, re-use and recycling, with disposal as a last resort.

Separate different waste types – this enables you to take the most appropriate and cost-effective course of action for each waste, rather than simply sending it all to sewer or landfill!

It's getting easier all the time to reduce, reuse and recycle in your business because better waste management products and services are becoming available as more firms come to recognise the business value of reducing waste.

See fact sheet 9, Materials efficiency, for more information on waste prevention and avoidance, and fact sheets 7 and 8 for more on reducing energy and water use.

GENERAL WASTE MANAGEMENT PRINCIPLES

Separate and label wastes

- separate your wastes: mixing may make them unsuitable for re-use or recycling
- clearly label waste containers and put them in convenient areas to encourage your staff to use them

Reuse wastes and containers

- reduce your waste disposal costs by buying products from suppliers that provide a collection, re-use or refill service for containers

Read on to find out how to manage:

- paint
- metal
- batteries
- tyres
- radiators and their fluids
- oil, fuel and spray filters
- cardboard, paper, glass and plastics
- liquid and hazardous wastes
- asbestos
- oils, fuels, brake and transmission fluids and solvents
- office and lunchroom waste
- waste contractors
- your recycling and solid waste disposal contracts

We will look at water, energy and materials efficiency in fact sheets 7, 8, and 9.

PAINT

- avoid leftover paint by making up only as much paint mix as is needed for each job
- do not dispose of waste paint in your skip. Use a reputable waste contractor to dispose of old paint (see Contractors, below) or talk to your supplier about taking back unused paint
- solvent recovery units are available and are suitable for paint waste: reuse your paint solvent as a cleaning fluid, and put the pigment in your skip

METAL WASTE

- separate metals such as engines, engine parts, vehicle body parts and catalytic converters, as many metal recyclers will pay for sorted materials such as aluminium, copper, iron, steel and other metals
- strip plastic off electrical cables to recover the metal cable and add it to your scrap metal stock for recycling – copper especially, is becoming quite valuable
- put separate metal storage containers in or near the work area – make sure they don't leak and cover them to stop rain getting in
- drain all liquids from engines and parts before putting them in any recycling bins provided by your scrap metal recycler
- scrap metal recyclers may also accept crushed and drained oil and fuel filters – but once again, drain out all residual oil for separate recycling before putting the filter in your scrap metal bin

BATTERIES

Exide Batteries run a recycling programme in New Zealand. For information about collection in your area phone the Dominion Trading Company on 03 343 9993. Alternatively, phone your local Marshall Battery outlet and ask if you can leave batteries with them for pick up.

When you do have old batteries on the premises:

- store all old batteries under cover and in a spill tray where no acid or lead corrosion can run or be washed into stormwater drains or the soil
- never tip acid out of old batteries

TYRES

Whole tyres are difficult to manage in landfills because they trap air and move around. Piles of tyres above ground are a fire risk: they are also a likely breeding place for rats and other vermin. It is reasonable to add the small disposal fees charged by collectors to your customer's account and to explain why it is charged.

Do the right things with tyres:

- contact your local district council to see if they require tyre collectors to be registered, and if so obtain and select from a list of registered collectors in your area
- ensure that your tyre collector can demonstrate that your tyres will go to a legal destination, and pay them a fair price to cover their costs. Be aware that undercutting fair prices can encourage illegal tyre dumping
- if you have too few tyres for them to collect, cut the sidewalls out with a sharp knife and put both pieces in your waste skip. Whole tyres will generally not be accepted at landfills.

RADIATORS

- drain all fluids from radiators before putting them in bins provided by your scrap metal recycler
- store all used fluids in containers in a covered, sealed and bunded area away from stormwater drains while awaiting recycling or collection by a reputable waste contractor (see fact sheet 3)
- store radiator tanks and cores awaiting disposal or exchange inside the workshop or under cover to reduce the risk of zinc or residual fluids washing into the soil and the stormwater system
- collect caustic solutions that contain heavy metals, sludges from aqueous baths and radiator washings for recycling or disposal through a reputable waste contractor (see fact sheet 3)

FILTERS

- **spray booth filters:** wrap old spray booth filters in the packaging from the new filters to prevent the paint dust from becoming airborne when your skip is emptied
- **used oil filters:** drain used oil filters (preferably while they are hot, to get as much out as possible) into a waste oil container and put the drained filters in a receptacle provided by a disposal company (see Waste contractors, page 5)

- **used fuel filters:** drain residual fuel from filters into a separate fuel container. The drained and dry filters can be placed in the same receptacle as the used oil filters
- crush drained oil and fuel filters in a modified drill press – this means you can put many more in the bin, making the collection service more economical. Collect for recycling the residual oil from crushed filters
- alternatively, hire a professional to remove them – for a fee, some companies pick up and recycle filters
- only put oil or fuel filters in your regular waste bins if there really is no other local recycling option

ASBESTOS

Asbestos is still found in brakes, clutches and gaskets. It is very harmful to human health when its small fibres are breathed in. Protect your staff by making sure they always handle and dispose of materials containing asbestos as set out in the 1995 Guidelines for the management and removal of asbestos (www.osh.govt.nz/order/catalogue/pdf/asbmgmt.pdf) and the 1998 Health and safety in employment (asbestos) regulations (www.osh.dol.govt.nz/order/catalogue/pdfs/asb001.pdf).

CARDBOARD, PAPER, GLASS AND PLASTICS

Talk to your city, district or regional council or look in the Yellow Pages for recycling companies. Note, however, that:

- used plastic oil containers are not accepted in recycling programmes
- there are limited recycling options for windshield glass, which is typically made from different materials and by different processes than container glass
- at the time of writing, there is not yet a real market for plastics recovered from vehicles, but manufacturers are now starting to design vehicles for recycling in order to create a market. Check for plastic recycling options with your council and any local plastic manufacturing or recycling firms

SOLID WASTES

- what you put in your skip generally goes to landfill, so only put solid waste in it – dry and non-hazardous materials. Drain all fluid out of non-recyclable items and clean them before putting them in the skip, to prevent leaks
- put all skips where liquids draining out of them can't get into stormwater grates

- keep skips covered at all times, and organise recycling bins so paper, plastic and other light materials are not blown around your site or onto neighbours' property

LIQUID AND HAZARDOUS WASTES

- see fact sheet 3, 'Hazardous substances', for more specific advice
- collect sludge from your trade waste and stormwater treatment systems, acid and alkaline baths, waste paints, thinners and solvents for recycling or disposal via a reputable waste contractor whose disposal permits you have seen
- drain all waste liquids such as radiator fluids, used oil, fuels, brake and transmission fluids into trays and then pour them into storage containers. Doing this thoroughly and immediately reduces the handling of waste liquids and minimises the danger of injuries as a result of chemical spills. Never allow waste liquid to drain or spill onto the floor
- some problem wastes such as drums containing hazardous waste sludge, gas cylinders, asbestos and synthetic mineral fibres need special attention for safe and proper disposal. Ask your city, district or regional council how to dispose of these
- you can generally handle liquid waste in one of three ways, depending on the nature and quantity:
 1. some liquid wastes can be treated and discharged to the sewer. You may need a trade waste permit (see fact sheet 1 for more information)
 2. some liquid wastes such as wash waters can sometimes be recycled on-site. If you generate big volumes, this can make it easier to reuse wash waters by collecting and filtering water from washing and sanding activities
 3. you can store liquid wastes for removal by a reputable waste contractor for treatment and disposal at a permitted waste facility
- store all liquid wastes awaiting collection (such as sludge and scum from wastewater treatment systems) in a sealed, banded and covered area for collection by a reputable waste contractor

OIL, FUEL AND SOLVENT

Many industries regard used oil as a valuable fuel. You cannot send used oil to landfills, but almost all towns have collection services for used oil. Call your regional council to find out who your local collection firms are what volumes they are prepared to accept.

Collectors are able to take lubricating oil and related oily products including: transmission fluid, gear oil, motor oil, hydraulic oil, differential oil and power-steering fluid.

Used oil containers should be covered, banded and clearly marked. If you collect large quantities of oil consult your local collector for advice on storage, or use the Ministry for the Environment's 2000 Guidelines for the management and handling of used oil, available from www.mfe.govt.nz/publications/waste/used-oil-guide-dec00.html.

For good management:

- keep fuels separate from all other liquid and solid waste streams
- re-use uncontaminated diesel or petrol in company or employees' vehicles
- many companies can now recycle your used solvents, coolants and fuel filters. Recycling these materials is much better for the environment than disposal and can save you money
- recyclers may be able to collect these materials if you keep substances in separate containers

OFFICE AND LUNCHROOM WASTE

- put recycling bins in convenient locations for paper/cardboard, glass, plastic and aluminium cans and organise collection through your city or district council or a recycling contractor
- old fluorescent light tubes in New Zealand can now be recycled – call your regional council to find out if there is a collection service in your region
- decomposable material can be collected and taken home for composting by a staff member

WASTE CONTRACTORS

- make sure your waste contractors are disposing of your wastes appropriately by asking for evidence of their consents or permits and getting a written assurance of their responsibility
- make your skip collection fees go further by compacting all solid wastes
- check that your liquid waste contractor is accredited in accordance with the Liquid and Hazardous Waste Code of Practice. The Code relates to liquid waste and hazardous waste, requiring transport from a waste generator to its treatment and/or disposal point. The Code has been developed to protect human health and the environment and is intended to provide best-practice references for parties involved in the waste industry
- waste contractors who pick up liquid waste often also pick up oily rags. This helps keep all oily wastes out of the general waste stream
- to minimise risk to your business make sure that your waste contractors transport, store and dispose of your waste in a legal manner – ask to see their permits
- keep all receipts for at least one year as evidence that you have disposed of your wastes responsibly

YOUR RECYCLING AND SOLID WASTE DISPOSAL CONTRACTS

Check out your contracts to make the most of the deal – or renegotiate them. Make sure you pack solid waste and recycling skips efficiently: you don't want to be paying good money to transport empty space to the landfill or recycling station. Train staff to flatten and compact materials in the bin and keep them out of the rain so they don't leak on your premises, carriers' trucks or at their destination.

FIND OUT MORE FROM

- your local, district or regional council
- the Yellow Pages – look under 'Recycling' and 'Waste disposal'
- Zero Waste New Zealand Trust www.zerowaste.co.nz/
- Waste Management Institute of New Zealand www.wasteminz.org.nz/

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