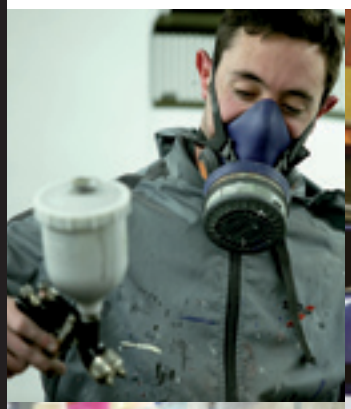
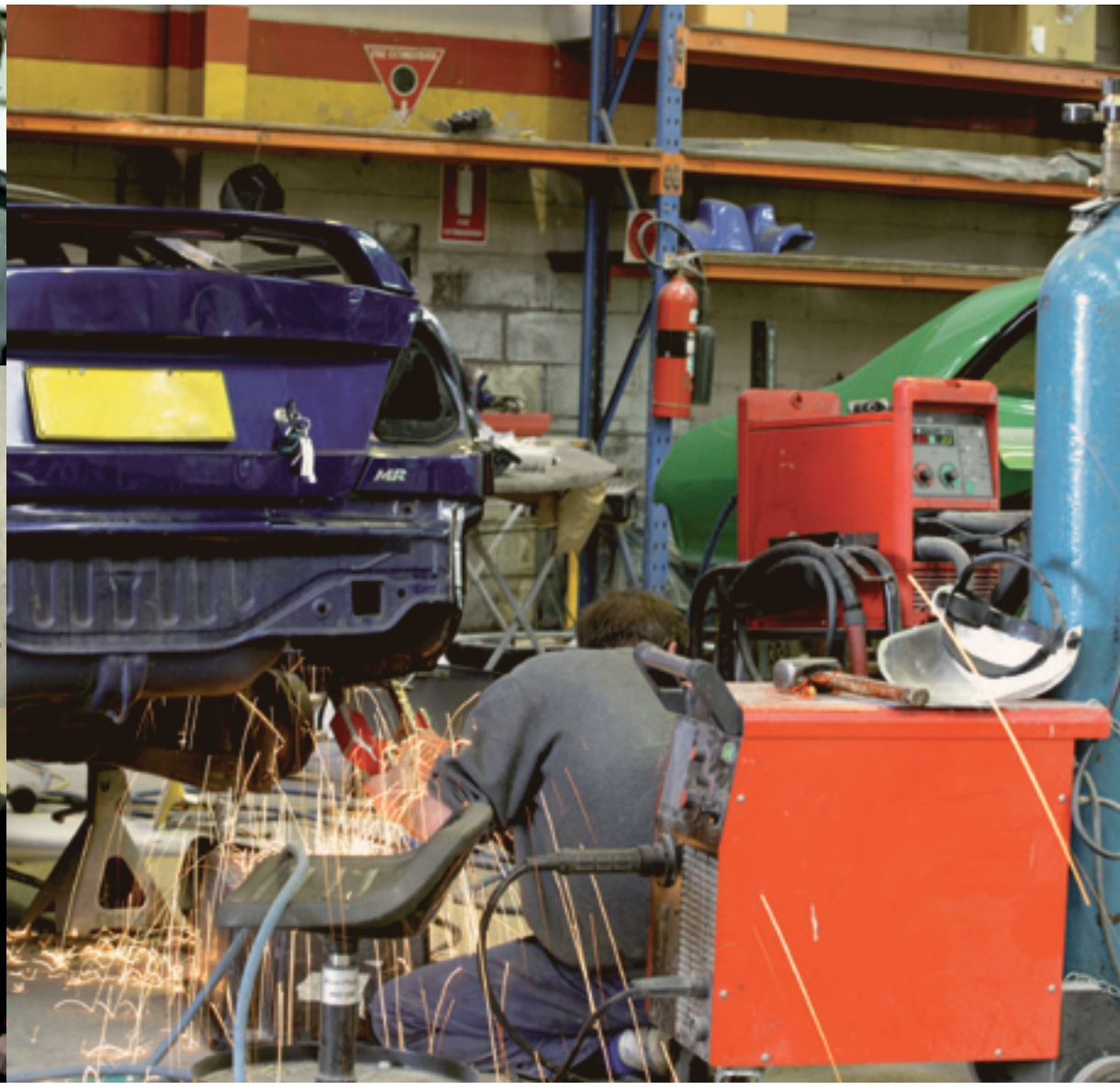
ENVIRONMENTAL ACTION FOR

SMASH REPAIRERS





our environment it's a living thing

Department of **Environment & Climate Change** NSW

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- Motor Traders Association of NSW

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- Nathans Prestige Autobody Repairs, Rouse Hill
- Regatta Motor Body Repairs, Five Dock
- Scientific Body Works P/L, Broadway

Please note:

This guide provides information relevant at the time of publication. It is not a regulatory document and does not provide legal advice. If you need more information regarding legal obligations, consult a lawyer, the legislation, DECC or your local Council.

While reasonable efforts have been made to ensure the contents of this guide are factually correct, DECC does not accept responsibility for the accuracy or completeness of the contents and is not liable for any loss or damage that may occur directly or indirectly through the use of, or reliance on, the contents of this guide.

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CONTENTS

ABBREVIATIONS

EPA	Environment Protection Authority – part of the Department of Environment and Climate Change NSW	OH&S	Occupational Health and Safety
DECC	Department of Environment and Climate Change NSW	POEO Act	*Protection of the Environment Operations Act 1997*
MSDS	Material Safety Data Sheet/s	VOCs	Volatile Organic Compounds

PRIORITY ACTIONS

FOR SMASH REPAIRERS

1. AIR QUALITY

- Use spray guns inside a spray booth to prevent spray drift
- Make sure that the spray booth filter is in good working order
- Always have the extraction system on when undertaking work in the spray booth
- If your spray booth uses water to capture spray drift, ensure there is sufficient water at all times
- Construct spray booths in accordance with the Australian Standards
- Sweep the workshop floor regularly to reduce dust
- Don't use evaporation to dispose of solvents and other chemicals

2. WATER QUALITY

- Store oily, greasy parts, drums, engines, radiators, batteries, etc on a drip tray and in a bunded and covered area to avoid leaks and spills
- Clean spills immediately, no matter how small. Keep a spill kit close to where spills are likely and ensure all staff know how to use it
- Mop the workshop floor. Avoid hosing the workshop, driveways and outdoor areas
- Regularly check and clean stormwater drains near your workshop to ensure they are free of debris

3. HAZARDOUS SUBSTANCES AND LIQUID WASTE

- Store oils, chemicals, paints and solvents in areas that will not allow spills to escape to the environment:
  – in a bunded area of the workshop
  – on bunded pallets or trays in a covered area
  – in a chemical storage unit
- Regularly audit chemicals stored on the premises and appropriately dispose of chemicals no longer used
- Use a gun wash when cleaning spray guns to capture solvent
- Minimise use of hazardous chemicals by replacing them with safer chemicals or non-chemical alternatives

4. BUNDING

- Bund your workshop with a grated drain or an impervious concrete or flexible rubber hump
- Undertake workshop activities on an impervious floor such as concrete
- Regularly check that chemical containers are not leaking and the bund is sound
- Have 'wet' and 'dry' areas in your workshop and ensure wet areas are bunded. All wet areas must drain to sewer or to a collection pit and be pumped out for disposal by a liquid waste contractor

5. NOISE

- Conduct all work inside the workshop to limit noise emissions
- Regularly service equipment, such as air compressors, to minimise noise
- Locate noisy equipment away from doors and openings
- When panel beating, or conducting other noisy activities, close doors to reduce noise impact on neighbours

6. WASTE

- Separate different kinds of waste for easy collection and recycling
- Keep lids on your waste bins or store them in a covered area to prevent the wind blowing waste away
- Avoid storing waste bins on footpaths or property belonging to others
- Use a liquid waste contractor to dispose of chemicals and other liquid waste. Don't put liquid waste into your waste bins
- When purchasing items such as batteries, tyres, radiators and mufflers, ask the supplier to take back the used goods

ENVIRONMENTAL OVERVIEW AND OPPORTUNITIES

This guide is part of a series prepared by the NSW Department of Environment and Climate Change (DECC) providing information to help businesses improve their environmental performance.

Similar guides for other business sectors are available through the DECC Environment Line on 131 555 or visit the DECC website – **www.environment.nsw.gov.au**

THE SMASH REPAIR INDUSTRY

The smash repair industry plays an important environmental role by extending vehicle life and thereby reducing the need for new vehicles. Minimising the environmental impact of your operations can be challenging, but many businesses report that improving their environmental performance can reduce costs and have other business benefits, such as improving staff morale.

What are the key environmental issues?

Key environmental issues for smash repairers are:

- Odours and air pollution due to spray painting and solvent use that release volatile organic compounds (VOCs) into the environment.
- Water pollution caused by allowing any material other than clean rainwater to enter waterways or stormwater drains.
- Handling, storing and disposing of dangerous goods and chemicals such as solvents, fuel and paint wastes. This can lead to soil and groundwater contamination.
- Waste management, including reuse, recycling and disposal.
- Noise impacting on staff and neighbours.
- Greenhouse gas emissions from energy use and release of VOCs.

WHAT IS THE PURPOSE OF THIS GUIDE?

This guide is designed to help NSW smash repairers to:

- Understand the environmental risks and responsibilities associated with the smash repair industry.
- Take action to improve the environmental management of their operations.
- Take advantage of the business benefits that result from improved environmental practices.

This guide provides information for owners, managers and staff. It will also be useful to environmental officers employed by local government. The guide does not provide legal advice but will provide the reader with an understanding of regulatory requirements under environment protection laws.

The 'Useful tools' section of this guide (page 44) contains checklists and other templates to help you start improving your environmental management. For instance, the 'Self-assessment checklist' contains the types of questions that an officer from your local Council or the EPA could ask when visiting your premises. You can use this self-assessment tool to evaluate your environmental performance and identify areas for improvement.

Occupational health and safety

Many of the issues addressed in this guide are also relevant to occupational health and safety (OH&S). This publication does not address OH&S issues in detail so it's important that you contact WorkCover NSW for more information.

ENVIRONMENTAL OVERVIEW AND OPPORTUNITIES

ENVIRONMENTAL MANAGEMENT FOR SMASH REPAIRERS – RISKS AND OPPORTUNITIES

For smash repairers, improving environmental performance is about managing risks and taking advantage of opportunities that will boost efficiency and profits.

A good starting point is to identify risks to your business from poor environmental management. Air pollution from a badly maintained spray booth for example, could pose the risk of:

- Environmental prosecutions and fines.
- Damage to business reputation.
- Harmful effects on the health, safety and productivity of staff.

Improving environmental management also provides opportunities to make a business more profitable and viable in the long-term. Even small changes can save money. For example, some smash repairers have cut electricity costs by installing or cleaning skylights and regularly fixing leaks in air compressors. Some of these simple improvements are described in more detail in 'Information Sheet 2: Resource efficiency'.

The benefits of a high standard of environmental management go beyond 'housekeeping' and efficiency. They also include benefits from:

- Being a 'supplier of choice', particularly to insurers and corporate clients who are considering the environmental performance of suppliers.
- Improved reputation as a company that is well managed and a valuable long-term business partner.
- Improved employee satisfaction, retention and productivity. Workshops that are clean, healthy and environmentally responsible are likely to attract good staff and make existing employees happier and more productive.

Operators can make the most of these business opportunities by integrating environmental issues into business planning and involving staff in identifying and delivering environmental projects.

For further information visit www.environment.nsw.gov.au

Do all spraying in a spray booth that is correctly designed and maintained.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or **www.environment.nsw.gov.au**
- Your local Council
- Institute of Automotive Mechanical Engineers – phone 9648 1412 or **www.iame.com.au**
- The Motor Traders' Association of NSW – phone: 02 9213 4222 or **www.mtansw.com.au**
- Motor Vehicle Repair Industry Authority – phone: 02 9712 2200 or **www.mvria.nsw.gov.au**

ENVIRONMENTAL COMPLIANCE – MEETING YOUR LEGAL RESPONSIBILITIES

NSW has a number of laws and regulations to help protect the environment and give guidance to business.

The Protection of the Environment Operations Act 1997 (POEO Act) is the main piece of NSW environmental legislation covering water, land, air and noise pollution and waste management. It also covers maintenance of motor vehicles.

In some cases breaking environmental law carries serious penalties. If you end up in court, the prosecutor may not have to prove that you intended to cause the damage or pollution. Even accidents can result in prosecution and penalties.

Everyone involved in your business (including owners, managers, supervisors, operators, contractors and subcontractors) needs to be aware of environmental laws that apply to your operations. Individuals are required to minimise the risk of an environmental incident by implementing precautionary and control measures.

Managers, directors and staff can be prosecuted for offences committed by their company, unless they can demonstrate they exercised all due diligence or they could not influence the conduct of their company. They cannot use lack of knowledge about the contravention as a defence.

A comprehensive approach to addressing regulatory requirements includes:

- Developing a plan that incorporates environmental management.
- Undertaking staff training and supervision.
- Completing a self-assessment or independent audit.

The 'Useful Tools' section of this guide provides templates to help you get started.

By gaining awareness of environmental laws, and how your business has the potential to affect the environment, you will be in a better position to manage risk in your business.

WATER POLLUTION

Under section 120 of the POEO Act it is illegal to pollute or permit pollution of waters.

Under the Act, 'water pollution' includes introducing litter, sediment, oil, grease, wash-water, debris, flammable liquids such as paint, etc. into waters or placing such material where it is likely to enter waterways. This includes the stormwater system and groundwater.

All practicable steps must be taken to ensure that unforeseen events, such as spills or leaks, do not result in pollutants entering the stormwater system, local waterways or groundwater. This means keeping chemicals (such as fuels, solvents, oils and coolants) in a bunded and covered storage area, having adequately stocked spill kits on hand and making sure staff know how to use them.

Under no circumstances should you hose a spill down the drain.

AIR POLLUTION

Air pollution means emitting any impurities into the air, including odours, volatile organic compounds (VOCs), smoke, dust, gases, fumes and solid particles of any kind.

Under the POEO Act (Sections 124-126), businesses must maintain and operate equipment in a proper and efficient manner to prevent air pollution at all times.

This means that you should:

- Ensure that spray booths have a filter properly installed and maintained in good condition.
- Regularly sweep and/or vacuum to keep dust levels down.

LAND POLLUTION

Under the POEO Act it is an offence to pollute land. Additionally, the POEO Act makes it an offence to wilfully or negligently cause any substance to leak, spill or otherwise escape in a manner that harms or is likely to harm the environment. All practicable steps must be taken to ensure that unforeseen events, such as spills or leaks do not result in land pollution.

HAZARDOUS MATERIALS AND WASTE

When handling hazardous materials and waste (such as oil, hydraulic fluid and solvents), it is an offence to cause any substance to leak, spill or otherwise escape in a manner that harms or is likely to harm the environment.

Make sure you're aware of the legal requirements before using, storing, transporting and disposing of hazardous waste (e.g. dangerous goods and chemicals). The laws relating to chemical storage vary depending on the amount that you are storing. For more information contact WorkCover NSW.

The movement of most hazardous waste must be tracked during its transport to a facility for treatment, recycling, or disposal. Waste may be tracked 'online' – for more information contact the DECC Environment Line on 131 555.

Under the POEO Act there are heavy penalties for unlawful disposal of waste. The owners of waste (as well as the transporters and receivers) have a responsibility to ensure their waste is managed, transported and disposed of appropriately.

INFORMATION SHEET 1

OFFENSIVE NOISE

Development consents or licences may contain noise limits that are relevant to your business. By law (POEO Act sections 139 and 140), you must not allow noise from your premises to be generated as a result of the failure to maintain or operate machinery or deal with materials in a proper and efficient manner.

Regulatory authorities may issue notices and directions requiring you to reduce or cease noise from your premises if it is 'offensive'. 'Offensive noise' means that by reason of its level, nature, character, quality or the time at which it is made, or any other circumstance, the noise is harmful or interferes unreasonably with the comfort of people who are outside your premises.

WHO 'POLICES' ENVIRONMENTAL LAW?

Environmental laws are policed by the 'appropriate regulatory authority' – usually the EPA (part of the Department of Environment and Climate Change NSW) or the local Council.

Local Councils usually regulate smaller businesses through inspections and the use of prosecutions if necessary. They can also regulate using development consents.

The POEO Act gives the appropriate regulatory authority the power to enter and inspect premises and issue clean-up or prevention notices and on-the-spot fines. The regulatory authority can also prosecute a business where environmental laws have not been complied with.

You must report incidents that harm the environment

If a pollution incident occurs and it causes or threatens 'material harm' to the environment, by law you must tell the appropriate regulatory authority – either your local Council or the EPA.

You must contact Council or the EPA as soon as you become aware of the incident. This 'duty to notify pollution incidents' extends to employers, the person carrying out the activity, employees, occupiers, contractors and agents.

For more information call the DECC Environment Line on 131 555 or visit **www.environment.nsw.gov.au**

You must report land contamination

You must notify the EPA of any land contamination that poses a significant risk of harm to human health or the environment (*Contaminated Land Management Act* 1997). This 'duty to notify contamination' falls on the owner of the property and on the person whose activities have caused the contamination.

For more information call the DECC Environment Line on 131 555, or refer to *Guidelines on the Significant Risk of Harm from Contaminated Land and the Duty to Report* (1999). You can find these guidelines on the DECC website – **www.environment.nsw.gov.au**

What are the penalties for environmental offences?

The most serious offences (Tier 1 offences) are wilful or deliberate breaches of the law that harm or are likely to harm the environment. These carry penalties of up to $5 million for a company or $1 million for an individual and/or seven years imprisonment.

Where breaches are negligent, the penalties for the most serious offences are up to $2 million for a company or $500,000 for an individual and/or four years imprisonment.

Most other offences (Tier 2 offences) carry penalties of up to $1 million (plus a daily penalty of up to $120,000 for continuing offences) for companies or $250,000 (plus a daily penalty of up to $60,000 for continuing offences) for individuals.

Less serious breaches can result in an 'on-the-spot' fine (penalty notice) with a penalty of $750 for individuals and $1500 for companies.

ENVIRONMENT PROTECTION NOTICES

Clean-up Notices

A Clean-up Notice may be issued by the EPA or local Councils when a pollution incident has occurred or is occurring. Clean-up notices may direct an occupier of a premises or the polluter to take clean-up action as specified in the notice. An administration fee (currently $320) is payable to the EPA or local Councils for the issuing of a clean-up notice. There is no right of appeal against a clean-up notice.

Prevention Notices

Prevention notices can be issued if an activity has been or is being carried out in an environmentally unsatisfactory manner. Prevention notices require that actions specified in the Notice are carried out. Prevention notices can include directions - such as installing bunding within one month around a chemical storage area. An administration fee (currently $320) is payable to the EPA or local Council for the issuing of a prevention notice. There is a right of appeal against a prevention notice to the Land and Environment Court.

Noise Control Notices

Noise control notices can be issued to prohibit an activity, or the use of equipment, from emitting noise above a specified noise level at a specified location for specified times. There is a right of appeal against a noise control notice to the Land and Environment Court.

LICENCES AND PERMITS

Trade waste permit or agreement

Generally, businesses must have a written agreement or permit to discharge trade wastewater to the sewer. You must negotiate a trade waste permit with your water authority (either Sydney Water, Hunter Water or your local Council) before any discharge occurs. The permit establishes the discharge conditions for the wastewater. For more information refer to 'Information sheet 4: Managing Water Quality'.

Dangerous goods

Dangerous goods include flammable, toxic or corrosive substances, such as solvents, which should be stored in containers displaying the relevant diamond-shaped label. Businesses that store dangerous goods in their premises may have to notify WorkCover NSW – the need to notify depends on the amount stored.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or **www.environment.nsw.gov.au** for:
  Noise Guide for Local Government
  Local Government Air Quality Toolkit
- Your local Council
- WorkCover NSW – phone 13 10 50 or **www.workcover.nsw.gov.au** for:
  NSW Code of Practice for the Storage and Handling of Dangerous Goods
  Notification of Dangerous Goods on Premises
- New South Wales Consolidated Acts – text of all NSW Acts online – **www.legislation.nsw.gov.au**
- Enivornmental Defender's Office – phone (02) 9262 6989 or **www.edo.org.au** for: the *Environmental Law Fact Sheets*

RESOURCE EFFICIENCY

Good managers understand that an efficient business is a profitable business.

Workshops can be made more efficient by reducing the resources they use, such as electricity, water and other raw materials, and minimising the waste and emissions they generate.

Saving money by 'doing more with less' is often referred to as cleaner production or resource efficiency. It involves finding ways to reduce costs and environmental impacts by taking a close, systematic look at workshop processes, products and services.

WHERE DO I START?

Plan and organise

The best ideas for reducing use of materials will come from the people who know your business better than anyone else – you and your staff. Encourage your staff to think about this and put forward their suggestions.

If your business is large enough, get management support to form an environment team that brings together staff from different areas of the business. Consider drawing on existing work teams, such as the Occupational Health and Safety Committee which may already bring together key staff from across the business.

If your business is too small for an environment team, simply follow the process below with one or two work mates.

Appoint a 'champion' or team leader who will co-ordinate action and drive environmental improvement projects. Ideally, the champion will have the full support of management and other staff.

Assess and measure

The team should look at how your workshop uses electricity, water, raw materials and other inputs. Look at the types of waste or pollution you generate and how you deal with them.

Collect information about consumption and costs of electricity and gas, water, raw materials, solid and liquid waste – this will provide you with a benchmark against which to measure ongoing improvement.

Look at the work flow, examining how jobs are handled from start to finish and housekeeping and maintenance procedures.

It may help to bring in an outside person with technical expertise who can bring ideas from other businesses.

Identify opportunities and implement priority actions

Your assessment of resource use and work flows will almost certainly identify immediate opportunities for cost savings.

Initiatives involving the highest potential savings and/or most rapid implementation should be the first priority. Implement them quickly as these 'small wins' will help to maintain the team's enthusiasm. Other ideas may need further research and assessment and may take longer to implement.

Try to record all ideas and options and prepare a simple action plan outlining opportunities, issues requiring further investigation, priorities, timeframes and staff responsibility for actions.

Start by using the environmental action plan template in the 'Useful tools' section of this guide, and adapt it to suit your business.

Document savings and evaluate success

Record the money spent on resource efficiency projects and the time taken to recover these costs – known as the 'payback' period. Look back at the benchmark data you collected to assess success and document the result of initiatives in terms of their financial, environmental and other outcomes.

Take the time to note other results such as staff enthusiasm, improved working relationships with suppliers and comments from customers.

Keeping a record of the project outcomes will help to justify further projects.

Keep Going!

Recognise the hard work of the environment team or 'champion' and encourage them to continue to look for new ideas. Promote achievements through a business newsletter, notice board, team meeting or other forum.

Remember, in order to keep making savings and improvements the action plan should be revisited regularly.

Don't forget the feedback

Don't forget to regularly communicate successes to your staff, customers and suppliers.

COST SAVING OPPORTUNITIES FOR SMASH REPAIRERS

Cost savings can be found in several areas:

Operate efficiently

- Changing spray booth filters regularly helps to increase the life span of exhaust fans, reduces fire hazards and prevents emissions of particulates and dust.
- Servicing spray booths and exhaust systems ensures they operate efficiently, reducing energy use and increasing the life span of the equipment.

Saving energy and reducing climate impact

Climate change has become the biggest environmental challenge we've ever faced. Every time you flick on the lights, turn on an air compressor or drive a car you produce carbon dioxide emissions, which are the main cause of global warming.

Maintain compressor hoses to avoid wasting electricity.

The following actions will cut your energy bills and reduce the amount of emissions produced by your workshop:

- Switch off electrical equipment rather than relying on 'stand-by' mode. For most equipment 20-80% of total energy is used when standing by.
- Regularly check your air compressor, hoses and joints to detect air leaks. Air leaks cause compressors to run unnecessarily and result in greater electricity costs. Repair or replace hoses where necessary and regularly service and maintain the unit.
- Operate air compressors with variable speed drives at minimum pressure to reduce air leaks and energy use. If the compressor starts up during a lunch break it indicates there is a leak somewhere and repairs are needed.

INFORMATION SHEET 2

INFORMATION SHEET 2

- Install an automatic timer to turn off the compressor when it is not required, including non-working days.
- Select an air compressor that is the right size for your activities so it runs as close as possible to full load. Do not install an oversized compressor to meet anticipated future demand. It is usually more efficient and economical to install an additional compressor later (when it's actually needed) or to have compressors dedicated to particular operations. A reciprocating air compressor is often the best match for the needs of a smash repair workshop.
- Use the energy smart toolbox online tool to calculate the potential energy, dollar and greenhouse gas savings made by repairing leaks, reducing system pressure and reducing inlet air temperature on your compressed air system: **www.energysmart.com.au**
- Ensure all motors are sized to operate between 70-90% of their full load capacity.
- Purchase energy efficient equipment. Where operating hours exceed 4000 hours per year) select a high efficiency motor as per AS1359, *Rotating electrical machines*, Part 5.3 high efficiency motors.

Choose the most appropriate compressor for your workshop needs.

- Install energy-efficient lights and switch them off when they are not required. Install skylights and use natural lighting where possible. Keep skylights and lights clean.
- Increase the thermostat setting on your air conditioner by 1 to 2°C in warm weather, and decrease it slightly in cool weather.
- Improve building insulation and enclose and ventilate heat-generating equipment.
- Install electricity usage meters to measure the amount of electricity used in different parts of your operation.
- Switch to Green Power and have your electricity supplied from renewable energy sources. Refer to **www.greenpower.gov.au** for providers in NSW.

Saving water

- To clean the workshop and other working areas, mop or sweep floors instead of hosing clean.
- Check taps, toilets and showers for leaks and drips and repair them promptly. Ensure all taps are turned off when not in use.
- Install water tanks for car washing, spray booth top up, house keeping and toilet flushing.
- Use high pressure jet guns to wash vehicles.
- Fit water efficient fixtures where possible, e.g. at least 3 star-rated taps, showerheads and toilets. For a list of water efficient products visit **www.waterrating.gov.au**
- Regularly service evaporative cooling towers to prevent excessive water losses and leakage.

Managing waste

- Consider repairing damaged plastic components. Plastic welding (whether in-house or out-sourced) provides an additional service for your customers and reduces the amount of plastic components in your waste bin.
- Segregate waste for recycling. Mixing wastes may make them unsuitable for reuse or recycling and more costly to treat.
- Encourage staff to recycle metals.
- Return empty drums to suppliers.

Reducing chemical use

- Make a list of the chemicals you purchase and look at how they are used to see if you can stop using any of them.
- Consider using less toxic chemicals, such as water-based paint and water based or biodegradable strippers, cleaners or degreasers, or non-chemical alternatives.
- Organise your chemical storage area so that older chemicals are readily accessible and used before they become 'out of date'.
- Keep lids on containers of solvents and solvent-based chemicals and fit taps to reduce evaporation and unnecessary loss of product.
- Many companies recycle solvents, oils and other liquid chemicals. Recycling these materials is better for the environment than disposal and can save you money. Don't mix waste oil, solvents or other materials together as it would make them unsuitable for recycling.

Rainwater tanks:

Nathan's Prestige Auto Body Repairs located at Rouse Hill, Sydney has installed two rain water tanks. The rain water is used in all aspects of the business including:

- Car washing and detailing
- Workshop wash down
- Spray booth filter water
- Gardens
- Showers and toilet flushing.

Since the tanks were installed Nathan's has never used water from the town water supply, even during drought years.

Rainwater tanks provide a free source of water for all your business needs.

Stopping air leaks from compressors can save 25% to 40% off your energy costs.

INFORMATION SHEET 2

INFORMATION SHEET 2

Technological upgrades

Gun cleaners are very effective in cleaning dirty spray guns and capturing waste solvent that was used in the cleaning process. They minimise time spent manually cleaning painting equipment. Waste solvent can be reused for additional cleanings. Once the spent solvent has been reused to the point that it is no longer effective for cleaning the gun, it can be disposed of by a liquid waste contractor.

A solvent recycling unit will reduce solvent purchase and disposal costs.

High-Volume/Low-Pressure (HVLP) spray guns operate at about 10 psi, which results in more paint adhering to the job compared to conventional spray guns. They reduce overspray and less paint 'bounces back' resulting in more paint staying on the part being painted. They can reduce the amount of paint used – saving money and reducing air pollution.

As well:

- Many industrial lighting options are very efficient and will save you money on your electricity bills. For instance voltage fixed dimming controllers can be installed to fluorescent lighting circuits. This can reduce energy consumption by up to 30%.
- Installation of energy efficient lighting including T8 and T5 triphosphor lamps, compact fluorescent lamps and metal halide lamps will lead to reductions in electricity costs.
- Ultrasonic cleaning uses sound waves in a water based solution (no solvent) to remove grease, oil and paint from parts, engines and carburettors.

Radiator coolant recycling

In an effort to reduce waste and save costs a small workshop decided to collect and recycle radiator coolant from cars. Over a six month period 300 litres were collected for recycling. By recycling coolant the workshop:

- Rarely has to purchase new coolant.
- Has no disposal costs associated with liquid waste contractors.
- Reduces the amount of hazardous waste that needs to be stored or disposed of.

A radiator coolant recycler.

- Consider using a parts-cleaner with solvent and/or vapour recovery systems. This increases the 'life' of solvents and reduces costs. The spent solvent can be collected and recycled off-site.
- Gas is considerably cheaper than diesel as a heating fuel for your spray booth. Consider converting to gas. Diesel produces four times more greenhouse gases than natural gas.

Working with suppliers and clients

- Encourage suppliers to provide materials in bulk and to take back their packaging. For instance could your chemical suppliers take back empty containers for re-use or recycling?
- Ask your chemical suppliers for less toxic alternative products.
- Promote the benefits of being an environmentally responsible smash repairer to your customers. This could enhance your reputation.

A High-Volume/Low-Pressure (HVLP) spray gun.

FURTHER INFORMATION

- DECC Environment Line - phone 131 555 or **www.environment.nsw.gov.au** for:

  Profits from Cleaner Production: A Self-help Tool for Small to Medium-sized Businesses

  Information on how you can reduce your greenhouse gas emissions
- Your local Council
- Sydney Water – phone 13 20 92 or **www.sydneywater.com.au** for water saving ideas
- Australian Standard 1359 *Rotating electrical machines* provides information on the efficiency of motors

MANAGING AIR QUALITY

In the smash repair industry typical emissions to air include:

- Dust and fine particles from grinding, polishing, carving, cutting, drilling and sanding.
- VOCs from spray painting, paint mixing, solvent use and general chemical use and storage.
- Particulate emissions from poorly maintained and operated spray booths.

VOLATILE ORGANIC COMPOUNDS

Many of the chemicals used in the smash repair industry contain volatile organic compounds (VOCs). These compounds vapourise readily at room temperature, are flammable, often odourous and can be harmful to human health. VOCs also cause hazy air pollution known as photochemical smog and contribute to the greenhouse effect.

The main sources of VOCs are fugitive emissions from using and storing chemicals.

They are contained in paints, solvents and other chemicals. VOCs are the main culprits when it comes to odour. Spray painting, leaving lids off containers, hand applying surface finishes and cleaning with solvents can all generate odours. Odours that can be detected by neighbours may lead to complaints and regulatory action, and they can also indicate that your operations are inefficient and costing you money. This applies to other types of air emissions too, such as particulate fallout from poorly contained spray painting.

Emissions need to be correctly vented from spray booths and other activities such as sanding. Vents should not be located near windows, doors and ventilation/AC inlets of neighbouring properties.

Where the neighbouring premises is multi-storey, the vents may need to be above the roof of the neighbouring building. If this is not possible, some emission control equipment needs to be installed.

For more information on air emission standards visit the DECC website:
www.environment.nsw.gov.au

SURFACE PREPARATION AND FINISHING

Dusts and fine particles are an OH&S concern and, due to their small size, may be transported through the air and impact on the health of the wider community. Dust can be generated by activities such as surface grinding, polishing, carving, cutting, drilling, etc. These activities need to be carefully managed to both minimise the amount of dust produced and collect it close to source.

Dust generating activities should be carried out with appropriate exhaust and filtration systems that remove dust from the work area and contain it for disposal. When fitting dust generating equipment to a centralised extraction system or using individual collection systems, it is important to ensure that the particles are contained. Many businesses use downdraft exhaust systems in designated preparation areas with suitable filtration to capture dust particles.

Spray booth filter in preparation area.

Efficient practices in the sanding area and vacuuming equipment can aid in the capture of polluting dust particles.

INFORMATION SHEET 3

SPRAY PAINTING

Spray painting should be carried out inside a well maintained and operated spray booth that complies with:

- AS/NZS 4114.1:2003, *Spray painting booths, designated spray painting areas and paint mixing rooms – design, construction and testing.*
- AS/NZS 4114.2:2003, *Spray painting booths, designated spray painting areas and paint mixing rooms – installation and maintenance.*

Businesses should have development consent from their local Council for the installation and operation of a spray booth. Advice from a suitably qualified air consultant should be sought before installing a spray booth.

Minimising emissions from spray booths

Spray booth filters are designed to capture particulates from the spray painting process. Although separators and filters capture particulates the volatile component of the spray (VOCs) are not captured; these are vented through the exhaust system. VOCs are often the source of odour complaints and are also significant contributors to the greenhouse effect.

Pollution control technology specifically designed to remove VOCs from spray booth extraction systems is not yet required by law, but its installation will benefit the environment and your business reputation.

The table below shows suitable spray booth filters for application rates.

Application rate	Suitable filter
more than 4 L/hour	wet
from 2 to 4 L/hour	wet, fibre (material)
less than 2 L/hour	wet, fibre, baffle

Water and fabric being used in a filter on a spray booth floor.

The following measures help minimise particulate emissions from spray booths:

- Regularly service the spray booth according to manufacturer's instructions. This includes maintaining water filter systems.
- Regularly check that the spray booth filters are in good working order and not damaged or blocked with paint residue.
- Keep spare filters on hand and change filters when required.
- Ensure that the filter material completely covers all of the frame space.
- Train staff in measures to reduce paint overspray and increase transfer efficiency.
- Use High-Volume/Low-Pressure (HVLP) spray guns to reduce paint overspray.

Keep your spray booth well maintained.

Cleaning spray equipment

- Clean guns using a gun wash station.
- Cleaning equipment immediately after use prevents deposits from hardening and makes cleaning easier. Under no circumstances should solvent be poured through spray equipment and sprayed onto the booth filters.
- If cleaning equipment without a gun wash station, immerse the item in the cleaning solution and keep a lid on the container to prevent solvent losses.
- Wrap spent spray booth filters in plastic prior to disposal to prevent the collected paint and particulates from escaping.

Gun wash system:

Kass Smash Repair is owned and operated by John Kass and is located in Marrickville. Kass installed a gun wash system which captures solvent, minimising evaporation and odours and allowing the solvent to be re-used. The gun wash saves time but also reduces the amount of new solvent required, resulting in cost savings. Staff also ensure that both new and waste solvents are stored in well sealed containers to prevent solvent loss and odours.

CHEMICAL USE AND STORAGE

Odours and the emission of VOCs to the atmosphere can be minimised by careful housekeeping measures:

- Regularly check that lids are tightly fitted to solvent containers, including thinners/ reducers and waste solvents, to prevent evaporation.
- Use taps on drums to minimise losses through pouring.
- Minimise the amount of solvent used in surface preparation work and cleaning.
- Mix only the amount of paint that will be required for the job.
- Ask your supplier about the availability of low-VOC paints.
- Ensure staff are aware of the costs to your business and the damage to the environment that can be caused by overuse of paints and solvents (it is often thought that spray booths remove VOCs, but this is not the case).
- Never evaporate solvent as a means of disposal. Recovered solvent can be recycled on site or sent to the supplier for re-processing.

Fitting taps on chemical containers will minimise losses and spillage.

Information on minimising the risks of spills or leaks to the environment and protecting water quality is included in 'Information Sheet 4: Managing water quality'.

INFORMATION SHEET 3

Air conditioners – refrigerant gases

Smash repairers who install, service or decommission air conditioners or refrigerators that use ozone depleting or synthetic gas refrigerants must hold a Refrigerant Trading Authorisation. They must conform to requirements and standards detailed in the *Ozone Protection and Synthetic Greenhouse Gas Management Regulations* 1995. Technicians must hold a national Refrigerant Handling Licence. You can apply for an authorisation or licence through the Australian Refrigerant Council at **www.arctick.org** or by phoning 1300 884 483. More information on the national system is available at **www.environment.gov.au**

KEEPING COSTS DOWN

- Regular servicing and inspecting your spray booths and exhaust system can help ensure they are operating efficiently and can increase the life of equipment.
- Excessive odours harm a company's reputation, so consider your customers, workers and neighbours by keeping odours to a minimum.
- If the use of solvents is unavoidable, the installation of a solvent recovery unit may result in cost savings over time.
- When heat is used for curing it may be worth having a specialist check the thermostat settings to ensure that you aren't using more energy than is necessary.
- You can save on cleaning requirements (and therefore paint losses) by batching spray jobs so that jobs using the same colour are carried out one after the other, and by scheduling lighter paint jobs first, followed by darker colours.
- Training staff in applying paint and chemicals effectively will reduce your costs.

WHAT THE LAW SAYS

There are a range of legal requirements relating to air pollution:

- It is an offence to cause air pollution (which includes dust and odours) through the inefficient operation or maintenance of equipment or handling of materials. For example, this could include failing to regularly inspect and maintain your spray booth filtration and exhaust system, leaving lids off containers containing volatile substances or sanding, grinding or spray painting outside an appropriate booth. Using evaporation as a method for disposing of spent solvents would also be considered an offence.
- Odours generated by your operations should not be detectable beyond your boundary. If odours are affecting any person outside the boundary of your premises then you may be issued with a notice requiring you to carry out work to prevent the odour.
- Open air burning and incineration of wastes is illegal in most local Council areas.
- The wilful or negligent release of ozone depleting substances such as chlorofluorocarbons (CFCs) to the atmosphere carries the highest of all penalties under NSW environmental law. Both the person who caused the release and the owner of the substance can be found guilty. Penalties are high and include imprisonment.

Gas used in vehicle air conditioners can be extracted and recycled.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or **www.environment.nsw.gov.au** for:
  Local Government Air Quality Tool Kit
  Spray Painting Safety Guide
  Air Emission Standards
- Your local Council
- WorkCover NSW – **www.workcover.nsw.gov.au** or phone 131 050 for:
  Spray Painting Safety Guide 2001
- Yellow Pages – **www.yellowpages.com.au** look under 'Environmental' and/or 'Pollution Control Consultants', 'Air Filters', 'Air Pollution Monitoring Equipment'
- Australian Refrigeration Council – **www.arctick.org** or phone 1300 884 483.
- Standards Australia – **www.standards.org.au**

MANAGING WATER QUALITY

Smash repairers carry out a range of activities that can lead to the pollution of waterways. Even small amounts of pollution can have a harmful effect on the local environment.

When it rains, stormwater runoff drains directly to creeks, rivers, or the sea. Pollutants such as oil, dust, detergents, sediment or other substances should not leave your site. If this occurs or if wash water, spilt liquids or any substance from your site enters stormwater drains or street gutters, you are committing a water pollution offence.

Make sure all stormwater drains on your premises – and surrounding your site – are clearly marked and kept free of debris.

The activities that may pose a risk of water pollution from your premises include:

- Washing and cleaning of vehicles, parts, equipment or work areas.
- Storage and handling of liquid substances such as paints, fuel and other chemicals.
- Storage of wastes (both liquid and solid wastes).
- Management of outdoor areas.

WASHING AND CLEANING

Washing and cleaning vehicles and equipment generates wash water. This wash water must not be allowed to flow to stormwater drains, street gutters or any waterway (even when washing with water only). All washing and cleaning should be carried out in an area that is either connected to the sewer under a trade waste agreement or

Always wash vehicles in an appropriate area. Wash bays should be enclosed and bunded. Ensure there is no possibility that wash water could flow into gutters, drains or any waterway.

fitted with a water treatment and recycling system. Even biodegradable cleaning products cannot be allowed to enter the stormwater system.

You may need an authorisation to use water for cleaning vehicles from Sydney Water, Hunter Water or your local water authority.

STORING AND HANDLING LIQUIDS

There are a number of measures that you can implement to minimise the risk of water pollution from the storing and handling of liquids occurring at your premises:

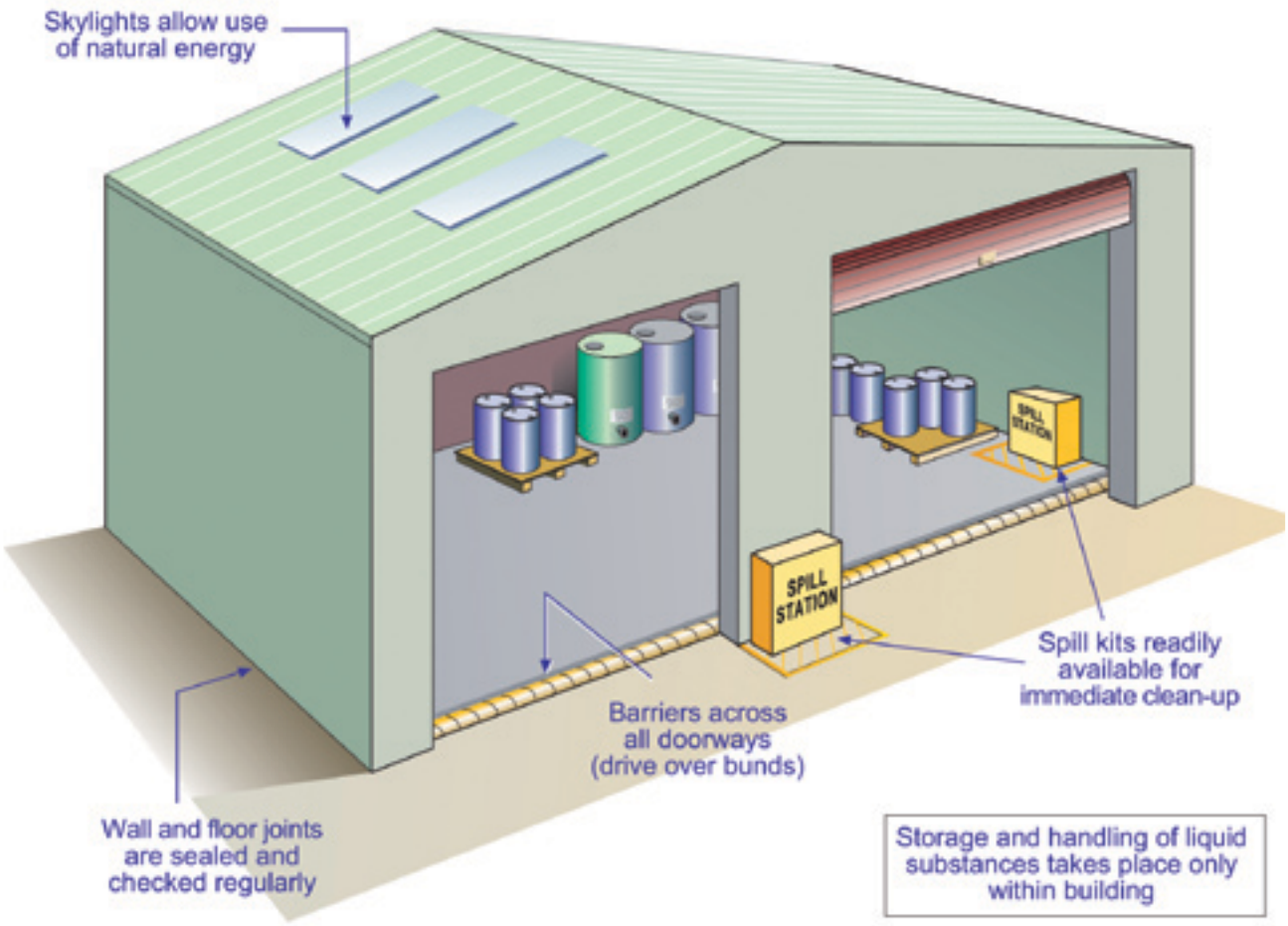
- Ensure that all liquids (including waste liquids) are stored and handled in bunded areas.
- Ensure that all staff are aware of how to clean up spills and that spill response kits are available and regularly re-stocked. Spills must never be hosed down a drain.
- Consider the risk of pollution from other activities at your site including: delivery of liquids, pick up of waste liquids, the use of hoses or pipes – would you be able to successfully contain a spill that occurred if a drum fell from a truck or if a hose ruptured?
- Discuss spill prevention with your staff, including issues such as minimising movement of chemical containers, using funnels for hand pouring and fitting taps to containers to avoid pouring.

Vehicles may only be washed outside if the wash water is captured and not diverted to gutters, drains or any waterways.

Spill pallets and spill trays are available from industrial and safety products suppliers.

INFORMATION SHEET 4

INFORMATION SHEET 4



Store all liquids in a properly bunded area protected from the weather. Source: *Storing and Handling Liquids: Environmental Protection,* produced by DECC.

Would you be able to contain a spill caused by a drum falling from a truck or a hose rupturing?

Bunded areas

You can minimise the environmental risks associated with spills or leaks by making sure that all liquids are handled and stored in bunded areas that will contain the liquid in the event of a spill or leak.

A bunded area prevents spilt liquids from escaping to the environment (waterways or the ground) and allows time for clean up or recovery. There are a number of ways that you can create a bunded area:

- Build or install a raised barrier around an area. This may include a concrete or rubber hump across the front of the workshop (impervious to the material being stored/handled).
- Bund the entire work area. This involves ensuring that the building has a sealed floor, sealed wall to floor joints and barriers across doorways to minimise the potential for liquids leaking to unsealed surfaces.
- In addition to bunding, the floor can be graded to an internal collection sump or grated floor drains. The grading minimises the potential for surface spills to drain to unsealed areas of the site, and the drains collect the liquid for disposal.

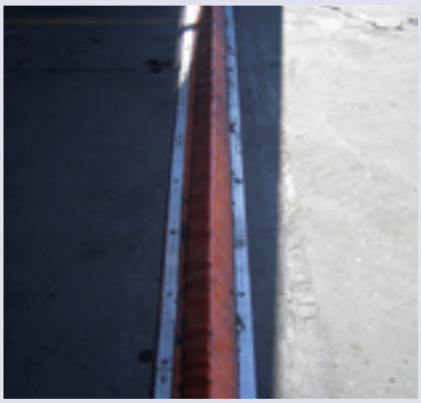
A floor sloped towards a collection pit can be a very effective way of capturing runoff and waste water.

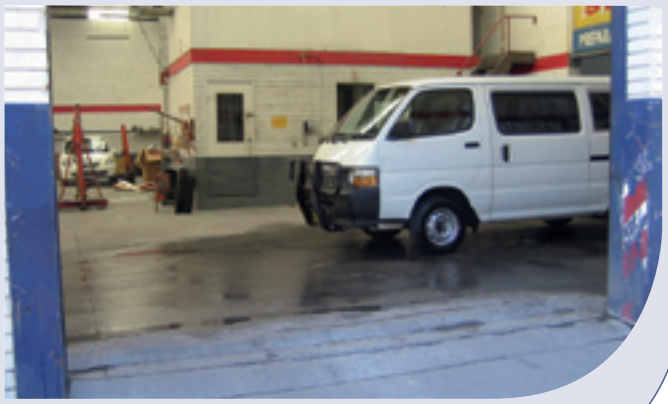
- Chemical storage units with inbuilt containment are useful for small chemical storage needs. (see p31)

Volumes for bunded areas should be at least 10% greater than the largest container stored or 25% of the capacity of all containers held within the compound (whichever is greatest). Outdoor bunded areas should be roofed to prevent rainwater from accumulating and decreasing the storage capacity of the area. Check with WorkCover NSW regarding safety considerations of roofing chemical storages.

Australian Standards for the construction of bunding should be followed where appropriate. This includes AS1940 for flammable liquids.

All bunded areas require regular inspection and maintenance to ensure they are performing and being used as intended.





Choose the bund most appropriate for your workshop. These photographs show two types of drive-over bund.

INFORMATION SHEET 4

SPILL RESPONSE

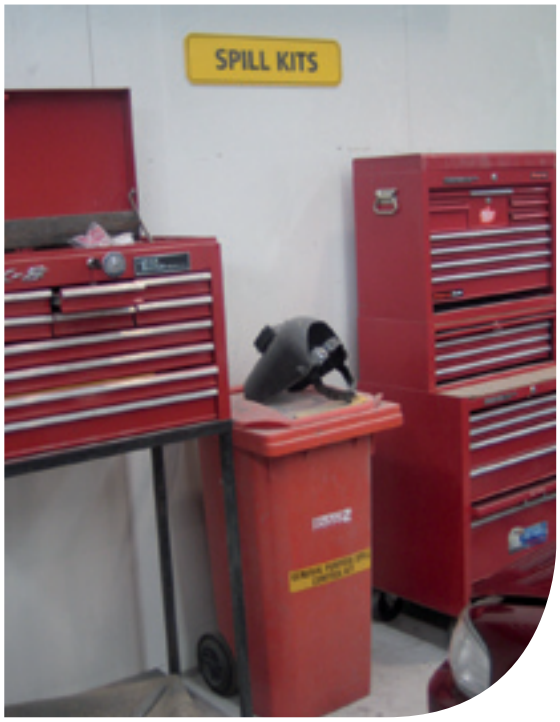
All spills, no matter how small, should be cleaned up immediately. They should never be hosed down drains, driveways or street gutters.

Prepare a spill clean-up plan. Ensure your staff are regularly trained in how to respond to a spill, including locating emergency equipment and how to use it.

A clear sign outlining spill clean-up procedures and emergency contact numbers should be prominently displayed in the workplace. Make all staff aware of emergency telephone numbers to call in the case of a spill. A template of emergency contacts is included in the 'Useful Tools' section of this guide.

The general spill response is:

1. Eliminate the source of the spill immediately if it is safe to do so.
2. Contain the spill. Use the materials in the spill kit to contain the spill and control its flow. If necessary, stop the spill from entering stormwater drains by blocking the drain inlets or by using a boom to contain the spill.
3. After referring to the relevant Material Safety Data Sheet (MSDS), clean up the spill promptly. It is important to clean up all spills quickly, even small ones, as they can easily flow into stormwater drains or be washed there by rain.
4. For major spills contact the Fire Brigade immediately on 000.
5. Store all waste generated from spill clean up in a bunded and covered area in sealed vessels (which limits emission of odorous or volatile compounds).
6. Contact a waste contractor who is licensed to dispose of chemical waste including the absorbents used in the spill clean-up.



A fully stocked spill kit is a must for any workshop.

WASTE STORAGE

All wastes that are stored for collection need to be kept out of the rain – either undercover or in a container or skip with a lid. Rain water that comes into contact with wastes (both liquid and solid wastes) can carry pollutants from the waste to the environment.

Liquid wastes need to be stored in a bunded and covered area to prevent spills from escaping and causing water pollution. Ensure that containers are appropriately labelled, sealed, stored upright and collected as soon as possible.

More information on waste is contained in Information Sheets 5 and 6.

MANAGEMENT OF OUTDOOR AREAS

If your premises has outdoor areas, you need to ensure they are managed to prevent the accumulation of pollutants that could be washed away by rain. Outdoor areas that drain to stormwater should not be hosed as a means of cleaning.

The following measures can help ensure that your outdoor areas are not causing pollution during rain events:

- Clearly mark all drains on the business site that connect to the stormwater system. This will increase awareness of the risk and enable immediate identification in the event of an accidental spill.
- Deliveries of liquids should be placed in an undercover bunded area immediately, not left outside.
- Wastes should be stored undercover or with lids on bins so that rain cannot come into contact with the waste. Liquid wastes awaiting collection must be stored in a bunded and covered area.

Drip trays are an efficient way of catching leaking radiator coolant.

Floor scrubbing machines minimise pollutant build up.

Make it part of a staff member's job to ensure that outdoor areas and drains are free of dust, debris and litter.

INFORMATION SHEET 4

- Regularly sweep outdoor areas to minimise the build up of pollutants. A floor scrubbing or cleaning machine that does not discharge water may also be suitable.
- As vehicles arrive, check for leaks and immediately place a drip tray to contain leaks. Store vehicles inside the workshop if possible.
- Work on vehicles that involves the use of liquid substances should be carried out on an impervious floor such as concrete.

Contaminated run off from your premises that enters any stormwater drain is still your responsibility.

KEEPING COSTS DOWN

The following actions may assist you in keeping your costs down:

- Maintain pre-treatment equipment in accordance with supplier's specifications. Well maintained equipment will last longer.

Grated drains ensure that surface runoff and spills are collected in a pit.

- Floor surface paints prevent oils being absorbed and reduce the need for cleaning.
- Mop or sweep workshop instead of hosing.

FURTHER INFORMATION

- Department of Environment and Climate Change – **www.environment.nsw.gov.au** for:

  Liquid Waste Facts Sheets – Information on the handling, storage and disposal of liquid waste

  Bunding and Spill Management

  Information on stormwater management
- Sydney Water, phone: 13 20 92 or online for: **www.sydneywater.com.au**

  Trade waste information

  Managing Trade Wastewater in the Motor Vehicle Industry
- Hunter Water, phone: 1300 657 657 or online: **www.hunterwater.com.au**
- Your local Council
- Yellow pages – **www.yellowpages.com.au** Look under 'Liquid waste contractors', 'Waste reduction and disposal services', 'Environmental &/or Pollution Consultants'
- The Motor Traders' Association of NSW – phone: 02 9213 4222 or **www.mtansw.com.au** for their GreenStamps Eco-Efficiency program

HAZARDOUS SUBSTANCES AND LIQUID WASTE

Appropriate storage, use and disposal of chemicals will benefit your staff, customers and the environment.

STORING AND USING CHEMICALS

Fire hazard prevention and occupational health and safety (OH&S) are important considerations affecting how you store, use and dispose of chemicals. You need to comply with the WorkCover NSW requirements relating to chemical hazards in the workplace.

Correctly storing and labelling your chemicals is an essential part of environmental management.

Chemicals also present a risk to the environment. Chemical spills that reach stormwater drains can pollute rivers and the ocean and fires involving chemicals can spread toxic fumes.

Note: In this document 'hazardous waste' is defined by the latest version of the DECC NSW *Environmental Guidelines: Assessment, classification and management of liquid and non-liquid wastes.*

'Information Sheet 4: Managing Water Quality' contains information on managing chemical substances to minimise the risk of water pollution. It contains information on bunded areas, spill management and trade waste.

In addition to the measures contained in 'Information Sheet 4: Managing Water Quality', the following considerations relate to the storage and use of chemicals and liquid waste:

- Store each type of chemical in a separate and appropriately labelled container. Inspect storage containers regularly and replace them if they are rusted, damaged or likely to leak. Allow yourself easy access.
- Clearly label each container with the name of the chemical it contains. Keep an up-to-date register of all chemicals on site, including Material Safety Data Sheets (see below) in an accessible location.
- If you use or store flammable liquids, you need to comply with AS 1940–2004: *The storage and handling of flammable and combustible liquids.*
- Store chemicals in appropriately bunded areas.
- Make sure all staff know about the potential hazards of the chemicals on-site.
- Store liquids according to the manufacturers' requirements – for example, solvents should be stored away from heat, naked flames, direct sunlight, oil or other flammable liquids. Do not store incompatible chemicals together.

INFORMATION SHEET 5

MATERIAL SAFETY DATA SHEETS

A Material Safety Data Sheet (MSDS) is an information sheet about the safe handling, storage, transport and disposal of a material. It is just as important as any tool or piece of equipment in your business. The information on the MSDS can save lives in an emergency and you should:

- Make sure you receive an MSDS for every hazardous substance you buy or use. If you don't have one for a material, ask your supplier. Make sure all relevant MSDS are readily accessible and check they are up-to-date.
- Make sure all staff have read the labels on all the chemical products they use. Labels on chemical products help to identify the product, its ingredients, and the hazards or dangers of the product. Labels also contain important health and safety information.

WorkCover NSW also has some useful publications on managing chemical hazards in the workplace. Phone 13 10 50 for more information.

Always keep the lids on waste solvent containers awaiting collection.

TRADE WASTEWATER

Trade waste is any liquid, and any substances contained in it, produced by an industrial or commercial activity at a business premises. Trade waste water generated by smash repairers usually comes from cleaning processes and wet rub down areas. This water may contain pollutants such as paint residues, sediments, oils, detergents and other chemicals. Trade waste does not include wastewater from toilets, bathrooms or non-commercial kitchens and laundries.

There are several options for dealing with the trade wastewater generated by your business:

- Contact you local water authority to arrange a discharge to the sewer.
- Direct the wastewater to a storage tank and arrange for a liquid waste removal contractor to remove it from site.
- Invest in water treatment equipment and storage tanks and reuse the wastewater within your business.

Discharging to the sewer – legal requirements

You must have a written agreement or permit from your local water authority to discharge trade wastewater to the sewer.

The two main water authorities in NSW are Sydney Water in the Sydney, Blue Mountains and Illawarra areas, and Hunter Water in the Newcastle region. Outside these areas Councils are the local water authority and manage trade wastewater.

Your agreement or permit will set out the discharge conditions for trade waste. Most water authorities require businesses to treat trade waste before discharging it to the sewer. As a guide, the minimum treatment often required for discharge to the sewer is an oil/water separator or a coalescing (corrugated) plate interceptor (CPI). A CPI directs wastewater to a tank in which the solids and liquids separate.

If they meet the requirements set by the local water authority the liquids can be discharged to the sewer. Pre-treatment devices should be located under cover and within a secondary containment area to ensure that leaks do not cause water pollution. It is the responsibility of the business owner to maintain the pre-treatment system in proper operating condition and ensure that regular servicing requirements are carried out.

Spray booth water cannot be disposed to the sewer – check with your local water authority on the appropriate methods for disposal.

Sydney Water and Hunter Water have trade waste officers who can help you fill out an application form for your trade wastewater permit.

A coalescing (corrugated) plate interceptor (CPI) treats wastewater before it is discharged to the sewer.

MANAGING HAZARDOUS WASTES

Smash repair workshops generate liquid wastes such as solvents/thinners, gun wash, paints, oils and coolant. These wastes have special storage, handling, transport and disposal requirements.

You should store all liquid wastes that are awaiting collection in tightly sealed containers in an undercover, bunded area that prevents leaks or spills from soaking into the ground or flowing to stormwater drains. All liquid wastes that cannot be reused or recycled should be segregated by type. Mixed waste is more difficult to handle and is usually more costly to treat.

Disposal

As a rule, hazardous wastes cannot go to landfill or be discharged to the sewer. They can never go in the stormwater system. If you are a generator of hazardous waste you are responsible for ensuring that it is transported to a facility that is licensed to receive and/or treat that type of waste. Your waste contractor should be able to provide advice on these issues.

To be accepted at a licensed liquid waste facility, liquid wastes need to be assessed in accordance with the latest version of the DECC *Environmental Guidelines: Assessment, classification and management of liquid and non-liquid wastes* and the waste facility's Environment Protection Licence conditions. Such conditions will list the types of liquid waste that can be received. When sending liquid waste for treatment or disposal, make sure that:

- The transporter is appropriately licensed.
- The waste is being sent to a facility that can lawfully take it.
- You keep all collection receipts.

Generally, the movement of hazardous and liquid waste must be tracked during its transport to a facility for treatment, recycling or disposal.

For the latest information about 'online' tracking, contact the DECC Environment Line on 131 555 or visit the DECC website:
www.environment.nsw.gov.au

INFORMATION SHEET 5

LIQUID WASTE LEVY

Under section 88 of the *Protection of the Environment Operations (POEO) Act* 1997, licensed waste facilities are required to pay a levy on all waste received at the facility. The levy aims to reduce the amount of waste being disposed of, and promote recycling and resource recovery.

The waste and environment levy has been extended to 'trackable' liquid waste and applies across New South Wales from 1 October 2007.

AVOIDING LAND CONTAMINATION

Hazardous substances, chemicals or any material that may pollute soil or waters should not be allowed to soak into the ground. For example, the ground should never be used as a means of disposing of unwanted substances. Chemicals can accumulate in the soil and may eventually seep into waterways or ground waters. They can also harm people who came into direct contact with contaminated soil.

KEEPING COSTS DOWN

The following ideas may help reduce your running costs:

- Consider installing a solvent recovery unit. Alternatively, collect used thinners and solvents in a suitable container and reuse them, or arrange for a liquid waste contractor to collect them from your site for recycling. Save money by purchasing recycled solvents for the general clean-up of spray equipment.
- Ask your chemical suppliers if there are less toxic alternatives to the products you are using. Additional costs may be offset by reduced disposal costs.

Hazardous Chemical Storage:

Barry and Brett Leslight own and operate Regatta Motor Body Repairs at Five Dock, Sydney. They have installed a hazardous chemical storage room which stores their paints, new and used solvents and other small quantities of chemicals. The entire chemical storage room is built on top of a grated floor. If there is a spill, liquids fall into the bund built under the floor where they are captured. The hazardous chemical storage room is built in accordance with Australian Standard 1940, and Regatta worked closely with Workcover when constructing it.

A storage room may be the best option for managing your chemicals and paints.

- Use the 'first-in first-out' procedure for chemical supplies. Date the chemicals you buy and use them in the order in which they arrive. This will preserve their quality and minimise waste from out-of-date chemicals.
- Consider converting from solvent based paint removal systems to dry stripping. Low pressure systems using reusable plastic media can gently remove paint, minimise dust emission and eliminate the generation of waste paint stripping solvent.

INFORMATION SHEET 5

WHAT THE LAW SAYS

The laws relating to chemical storage vary depending on the quantity you are storing. Check with WorkCover NSW to determine whether you need to notify them of the chemicals you store on your site.

In practice, to avoid polluting waters or the land means you should:

- Store chemicals and hazardous waste in properly maintained bunded areas.
- Ensure liquid wastes are not poured onto the ground or evaporated.
- Ensure that pollutants from your operations and any leaks or spills of chemicals are contained and cannot enter the stormwater system.
- Report spills or leaks causing or threatening material harm to the environment to the appropriate regulatory authority – either the EPA or local Council.
- Ensure liquid waste is sent to a facility that can lawfully take it.

Never use evaporation as a disposal method for solvents.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or www.environment.nsw.gov.au for:

  Liquid Waste Facts Sheets – Information on the handling, storage and disposal of liquid waste

  Bunding and Spill Management

  Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes

  NSW Waste Tracking Requirements – An Update

  Contaminated Sites Guidelines

  Information on engaging a contaminated land consultant

  Hazardous materials (Hazmat) register of suppliers who provide resources, equipment, products and advice to minimise the environmental effects of hazardous materials incidents –
- Your local Council
- WorkCover NSW – **www.workcover.com.au** or phone 131 050 for:

  Management of Dangerous Goods Storages (DG 051)

  Signs for Dangerous Goods Package Stores (DG 062)

  Segregation of Packaged Dangerous Goods (DG 064)

  Examples of Typical Storage Sheds (DG 354)
- Standards Australia – phone (02) 8206 6000 or **www.standards.org.au** for:

  AS 1940–2004 *The storage and handling of flammable and combustible liquids*
- Yellow Pages – **www.yellowpages.com.au** Look under 'Chemical Spill Equipment', 'Waste Reduction & Disposal Services' and 'Environmental & Pollution Consultants'.
- NSW Fire Brigade – **www.nswfb.nsw.gov.au**

SOLID WASTE AND RESOURCE RECOVERY

Waste disposal can be expensive and businesses able to reduce the volume of waste sent to landfill enjoy considerable cost benefits.

Efficient waste management includes:

- Selecting products that have reduced packaging.
- Choosing suppliers who will take back empty containers.
- Training staff in waste minimisation practices (e.g. maintaining equipment).
- Reusing materials on site.
- Separating wastes for recycling.

AVOIDING WASTE

Waste is best avoided in the first place. To reduce waste in your business:

- Investigate how you can reduce the amount of raw materials you use. Consider repair and reuse before choosing the replacement option.
- Avoid spoilage of raw materials. For example, consider whether savings from buying in bulk outweigh the costs of spoilage. Would 'just-in-time' purchasing yield similar savings? Could storage of raw materials be improved?
- Use chemicals on a first-in-first-out basis to reduce the likelihood of them becoming out-of-date.
- Purchase products with less packaging.
- Service equipment regularly to reduce spoilage from equipment malfunction.

KEEP REUSING MATERIAL

Reuse of materials is preferable to disposal. Reuse strategies include:

- Give your customers the option of good quality second-hand parts. It is often a cost effective alternative to purchasing new components.
- Careful use of containers, mixing vessels and other short-term items can extend their life, saving disposal and replacement costs.

The best ideas for reducing use of materials will come from the people who know your business better than anyone else – you and your staff.

RECYCLING WASTE

Contact your local Council about recycling services or talk to your waste contractor about the wastes you're disposing. They may have a cheaper rate that applies to some of your wastes.

Once you have established which waste can be recycled, decide with your staff how you could best organise your recycling system and label your recycling bins to avoid contamination. Ensure that bins are emptied regularly.

Separating metal wastes saves on disposal costs and can generate income.

Many wastes generated by smash repairers can be recycled, including:

- Steel, cast iron, aluminium and copper, which are valuable and sought after by recyclers. They should be stored in a secure container for collection by a metal recycler.
- Plastic components such as bumpers bars and head lights, which can be sent to recyclers or plastic repairers. If you have sufficient quantities of plastic parts with minor damage, you may want to consider plastic repair on site.
- Car batteries, which are classified as a 'hazardous waste' and should be collected by a licensed contractor. While awaiting collection, batteries must be placed in an appropriately bunded and covered area to avoid leakage of the lead acid they contain. Ask your waste contractor about recycling batteries.
- Tyres, which should be stored in a manner to reduce risk of fire. Tyre resellers will take back old tyres but there is usually a charge for this service. Talk to your tyre suppliers and waste contractors about the options for recycling your tyres. Tyres cannot be sent whole to landfill.

Plastic components can be sent away for recycling, or can be repaired in-house.

INFORMATION SHEET 6

DISPOSING OF WASTE

Waste that you put in your waste bin will generally go to landfill. Place only dry, solid, inert materials in industrial waste bins. Do not put liquid or hazardous waste in your general waste bin.

Workshop sweepings, spill products, oil filters, spent abrasive material, containers and rags contaminated with chemicals such as oil and paint are generally classified as hazardous waste. They must be transported to a facility that is licensed to receive and/or teat that type of waste. For more information contact the DECC Environment Line on 131 555.

Some metal recyclers have the capacity to collect crushed and drained oil filters if you have large enough quantities. Check with your waste contractor.

STORING WASTE

If your waste is being stored for reuse, recycling or disposal it is important to make sure the storage area does not pollute the environment, by:

- Storing waste under cover to prevent rain running through the waste and polluting the soil and waterways.
- Making sure wind can't blow waste around, causing litter or potential stormwater pollution.

Bumper bars being stored for recycling, and a cardboard crusher. Well-organised materials storage and separation can lead to environmental and financial savings.

Reducing waste:

Miranda Body Shop is located in Sydney's south and is owned and operated by Bob Mackay. Miranda Body Shop has a dedicated room for the separation and temporary storage of wastes. From here it can be directed to the most appropriate collection service. This includes bumper bars, headlights, cardboard, tyres and used solvent. As a result, the amount of waste ending up in the general waste skip has fallen and disposal costs are greatly reduced.

Having a separate waste room in a secure part of the building also eliminated problems with outdoor storage of the waste, such as: other people using the waste bin, the skip bin being set on fire and having rubbish blow out of the bin.

Storage bins indoors can solve problems such as other people using them or rubbish blowing away.

KEEPING COSTS DOWN

The following ideas may help reduce your running costs:

- Conducting a waste audit to determine where cost savings in waste disposal can be made.
- Separate wastes so that you have the ability to maximise recycling.
- Seek payment for valuable items such as metal.
- Purchase second hand or reconditioned parts wherever appropriate, or repair parts on site.

WHAT THE LAW SAYS

Under the POEO Act penalties apply for unlawful disposal of waste. Both the person who dumps the waste and the person who owned the waste may be liable – so it's important that you make sure your waste is managed, transported and disposed of appropriately.

Other legal considerations include:

- Burying, open air burning and incineration of wastes is illegal in most local government areas.
- Hazardous wastes have special storage, transport and disposal requirements and you may have to use a licensed waste transporter—refer to 'Information sheet 5: Hazardous substances and liquid waste'.
- Wastes awaiting removal need to be stored so that they cannot blow or wash into stormwater gutters or drains.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or **www.environment.nsw.gov.au** for:
  - Cleaner production case studies
  - Waste avoidance and resource recovery
- Your local Council's Waste Officer
- Yellow Pages – **www.yellowpages.com.au** look under 'Waste Reduction' and 'Disposal Services', or 'Recycling'
- MTA Products and Services Directory **www.mtansw.com.au**
- Auto Parts Recyclers Association of Australia (APRAA) **www.apraa.com**

MANAGING NOISE

All workshops generate noise, which can become 'pollution' if someone finds that noise offensive.

Noise monitoring can help your business identify opportunities to work more quietly.

Typical noise sources from smash repair activities include:

- Hammering, grinding and cutting activities.
- Moving vehicles in and around the premises.
- Using noisy equipment such as air compressors.
- Carrying on with work after hours.
- Having a public address system and loud telephone bells.

Minimising noise is important for OH&S reasons. However, it is often the case that noise that annoys neighbours may not be a problem for staff.

IMPROVING NOISE MANAGEMENT IN THE WORKSHOP

To improve noise management, identify noisy work practices or equipment in your workshop and consider ways of reducing the noise. Measures to reduce noise include:

- Avoid outdoor work.
- When panel beating, or conducting other noisy activities, close workshop doors to reduce noise impact on neighbours.
- Ensure that your business only operates within the hours approved by your local Council. Check your development consent.
- Provide your neighbours with a contact telephone number they can call if they are experiencing a problem with noise from your workshop.

Work involving noisy equipment should be carried out indoors or in a well insulated area.

- Consider the layout of your workshop – are noise generating practices / equipment within the workshop located away from doors or other openings and away from neighbours?
- Regularly service all potentially noisy equipment such as air compressors. Lack of maintenance can often cause higher noise levels. You may also be able to modify the fan or compressor unit, but discuss this option with your manufacturer or supplier first.
- Consider installing sound reduction measures such as: mufflers, silencers, sound absorbing boxes or barriers around equipment or even a solid barrier or fence around your premises.
- Ensure that staff are aware of noise issues associated with running engines, equipment use and radios/music.

An acoustic consultant can assist you to identify noise generating equipment or practices that may be contributing to noise that is offensive to your neighbours. This can help you in targeting your noise reduction efforts.

KEEPING COSTS DOWN

Equipment that is making more noise than usual could well be running inefficiently and using more electricity.

WHAT THE LAW SAYS

The *Protection of the Environment Operations Act* 1997 provides regulatory authorities with powers to issue notices or directions to cease offensive noise. If someone can hear your business activities and they have reasonable grounds to be annoyed by this, then you may be creating offensive noise. It is an offence to continue the noise in breach of the notice or direction.

You may also be committing an offence if noise is emitted from your premises due to your failure to maintain or operate equipment efficiently, or to deal with materials in a proper and efficient manner.

Your local Council is responsible for dealing with noise complaints about your premises (unless you hold an Environment Protection Licence). Check your development consent for conditions relating to noise and hours of operation.

If necessary, Council officers can work with you and your neighbours to help resolve noise issues. However, Council officers can also issue notices and directions to reduce noise from your premises.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or **www.environment.nsw.gov.au** for: *Noise Guide for Local Government*
- WorkCover NSW – **www.workcover.nsw.gov.au** – phone 131 050
- Yellow Pages – **www.yellowpages.com.au** Look under 'Acoustic Materials and/or Services', 'Noise Control', 'Noise Control Equipment' and 'Noise Insulation'
- Your local Council

Take a regular walk around your premises to assess the noise coming from your activities.

BRINGING IT ALL TOGETHER – PLANNING

This information sheet is about the use of good planning to help you minimise risk and achieve best practice.

There are many steps along the path towards best practice. Here are some suggestions:

1. Make a commitment to yourself and your staff to consider the environmental impact of your business, such as from the purchase of chemical stock and techniques used.
2. Commit to increasing your environmental awareness. Reading this guide and offering staff time to read the guide can help in this process.
3. Create an environment team to identify environmental issues and propose solutions, or identify someone as an environmental 'champion'.
4. Make contact with your local Council and industry association to tell them what you are doing. They may have some advice or know of programs that could assist you.
5. Make contact with your neighbours. Build a working relationship so that any concerns about your operations that might arise can be readily addressed.
6. Conduct regular environmental audits of your premises.

There are several advantages to planning and documenting measures to improve the environmental performance of your business:

- Demonstrating 'due diligence', which is a very important defence in the event of an environmental pollution incident. If an environmental incident occurs on your site, providing documentation that shows that you have been acting responsibly and actively trying to avoid such incidents is your best defence.
- Customers may have a preference for businesses which are able to formally demonstrate their environmental credentials.
- Planning and reviewing allows you to be systematic in improving your environmental performance and documenting cost savings.

Helpful documents to create and keep include:

- An environmental policy
- An environmental management plan
- A waste management plan
- Records of staff training, staff inductions, waste disposal receipts, maintenance and inspection schedules.

An environmental policy could be as simple as a one paragraph or a one page statement that states your commitment to comply with environmental laws and implement best practice wherever possible.

An environmental management plan describes environmental issues or risks and what is being done to address them. It does not have to be a large document and could be part of your OH&S documentation. The important thing is that somewhere you have a document which:

- **Identifies** environmental requirements.
- Contains **actions** for environmental improvement (both ongoing and planned).
- Indicates **who** is responsible for carrying out each action.
- Indicates **when** (by what date or how often) these actions will be carried out.
- Contains quantified **reduction targets** (in volume, weight or costs).

It is a good idea to review and update your environmental management plan regularly. Retain records of environmental audits and inspections. An example of an environmental management plan is included in the 'Useful Tools' section.

Examples of daily and weekly checklists are included in the 'Useful Tools' section. You should amend these to suit your business.

Improving environmental performance might seem like a costly task, but many improvements can be made which also result in cost savings for your business. You may wish to start by having a waste and energy audit carried out – you can do it yourself or have a consultant carry out the audit for you.

FURTHER INFORMATION

- DECC Environment Line – phone 131 555 or **www.environment.nsw.gov.au** for: *Profits from cleaner production: A Self-help tool for small to medium-sized businesses*
- Your local Council
- Yellow Pages – **www.yellowpages.com.au** Look under 'Environmental and/or Pollution Control Consultants'
- Motor Traders' Association (MTA) – for information and case studies on EMPs, visit **www.mtansw.com.au**
- Queensland EPA has a free 'ecoBiz' tool that can help in identifying cost savings – **www.epa.qld.gov.au**

SELF-ASSESSMENT CHECKLIST

This checklist can help you evaluate your environmental performance and identify areas for improvement.

You can use this as a starting point and refine it, where needed, to best suit your business. It's strongly recommended that you complete some form of environmental self-assessment for your business on a regular basis.

This checklist is comprehensive and may take over an hour to complete.

Date of assessment: _____

Company name: _____

Property address: _____

Person conducting assessment: _____

Area/building being assessed: _____

What types of activities are carried out in this area/building? _____

_____

Is a site plan available? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed: _____

If yes, please attach a copy of the site plan.

The following questions are designed to help you identify and prioritise actions for environmental improvement. The checklist will also help you determine if your business could be vulnerable to prosecution and fines under environmental legislation.

Once you have completed this checklist, take a look at the questions that you consider require further investigation or action. Use these questions to develop an environmental action plan. A sample 'Environmental action plan' is included in this 'Useful tools' section of this guide on page 56.

REGULATORY ISSUES

Are you aware of the environmental laws and regulations relating to your operations? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you comply with the conditions of consent provided in your development approval? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you hold permits, licences or agreements for the site from the local Council and water / sewerage authorities (for example Sydney Water or your local Council?) Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

ENVIRONMENTAL MANAGEMENT

Are daily or weekly checks carried out to make sure correct procedures are being followed to protect the environment? (Refer to the sample daily and weekly checklists in the 'Useful tools' section of this guide.) Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have an environmental policy? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have an environmental action plan? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

If so, does the environmental action plan have objectives, targets, responsibilities and budgets (where applicable)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have an emergency response plan (including a spill management plan and emergency response plan)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Have all staff been trained in environmental responsibility – such as preventing dust, avoiding spills, minimising waste, etc? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are your staff aware of your commitment to improving your environmental performance? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are your customers aware of your commitment to improving your environmental performance? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have a procedure in place to deal with complaints from the public, regulatory authorities or staff regarding environmental issues? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have formal reporting requirements in place for recording accidents and spills that harm or may harm the environment (i.e. an incident report form)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

MANAGING WATER QUALITY

Do you know where the stormwater drains are located on and surrounding your premises? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are these stormwater drains appropriately marked? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have any structures or procedures in place to prevent stormwater pollution? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is stormwater run-off from your site always kept free of pollutants, such as litter, grease, dust and oil? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you store your hazardous materials, such as coolant, solvents, fuels and other chemicals, in a bunded and covered area that will not allow any materials to be spilled or washed into stormwater? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you regularly check that the bunded area is sound and able to contain spills and leaks (of adequate size and impermeable to the liquid/ material stored)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are staff trained in spill avoidance and management procedures? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you use a broom or blower instead of a hose to sweep and clean up the surface areas around your premises? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

WASTEWATER MANAGEMENT

Do you ensure that vehicles and parts are only washed in areas where the water is collected for disposal and not allowed to enter the stormwater system? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you ensure that wet rub down of vehicles or parts is only conducted in areas where the water is collected for disposal and not allowed to enter the stormwater system? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have a trade waste agreement or permit? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are your liquid wastes collected by a licensed waste transporter? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have an oil/water separator for pre-treatment of your wastewater? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is your oil/water separator regularly maintained? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is wastewater and other liquid waste appropriately stored in a bunded and covered area for collection by a licensed liquid waste disposal service? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

MANAGING AIR QUALITY

Have all potential sources of air emissions and odours been reviewed, for example dust from surface preparation and odours from spraying? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Have you received complaints about dust or odours from staff or neighbours? Yes* ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is all spray painting carried out inside a spray booth? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are spray booth filters in good working order and fitted to cover the entire frame? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is there sufficient water in the base of the spray booth to act as a filter trap (if applicable)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are spray booth exhaust fans in good working order with an unimpeded discharge? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Does your spray booth conform with Australian Standard 4114.1:2003? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are your spray guns high volume – low pressure (HVLP)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you use a spray gun wash-bowl to capture cleaning solvent? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are lids kept on chemical containers when not in use? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are solvents and paints stored and applied using methods that minimise air emissions and odours? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are staff licensed to remove car air conditioning gases (if applicable)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is car air conditioning gas collected by a licensed contractor (if applicable)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Can you detect odour from your premises when you are outside the property boundary? Yes* ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

HAZARDOUS SUBSTANCES AND LIQUID WASTE

Does the hazardous materials storage area comply with dangerous goods regulations and appropriate Australian Standards? For example, is the area bunded, covered and fireproofed and are non-compatible materials separated? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Have you notified WorkCover NSW of the dangerous goods stored and handled on the premises? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you keep an up-to-date inventory of all of the chemicals stored at the site? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are chemicals no longer in use appropriately disposed of from the site? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is the content of all containers identified and appropriately labelled? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do staff know where to find Material Safety Data Sheets (MSDS) on site? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do staff know how to prevent, contain and clean up spills? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are spill kits available? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do spill kits contain the correct materials to deal with spills from all of the hazardous materials and dangerous goods kept on site? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are spill kits regularly checked and refilled? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you dispose of liquids into the general waste bins? Yes* ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Have you considered using less toxic chemicals or non-chemical alternatives? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is there any evidence of ground contamination at your site (e.g. visual stains, odours, affected vegetation)? Yes* ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are all painting, sanding and repairs undertaken indoors and on an impervious floor such as concrete?? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are parts containing oil stored in covered and sealed areas and transferred in secure and bunded containers? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Is abrasive blasting material used inert (not copper/slag)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you store all your chemicals and hazardous waste in appropriate containers and in a bunded and covered area to avoid pollution of the environment? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

SOLID WASTE AND RESOURCE RECOVERY

Has a waste review been carried out? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed: _____

Complete the following to obtain baseline information on your wastes:

Landfill waste _____ kg/month disposal cost $ _____ per month

Hazardous waste _____ kg/month disposal cost $ _____ per month

Liquid waste _____ L/month disposal cost $ _____ per month

Are all your hazardous wastes (e.g. waste solvents, oil, cleaning chemicals etc.) collected by a licensed waste contractor and taken to a waste facility legally permitted to receive it? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Waste facility name: _____

Actions needed: _____

Do you separate different types of waste so they can easily be repaired, reused, recycled or returned to the supplier? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed: _____

Do you keep your solid waste bins with the lid on and stored in a covered area to prevent the wind blowing waste away? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed: _____

Do you encourage your suppliers to take back packaging wastes, such as crates and plastic drums? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed: _____

Have you talked to your waste company about recycling options? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed: _____

Do you reuse or recycle:

Paper/Cardboard? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Scrap metal and parts? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Batteries? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Oil? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Solvents? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Aluminium cans/glass containers? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Wood, such as pallets and boxes? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

Plastic drums and containers? Yes ☐ No ☐ N/A ☐ Don't know ☐

Contractor name: _____

Actions needed: _____

MANAGING NOISE

Are you aware of the effects of your noise on your neighbours? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are noise complaints followed up? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you regularly check and maintain noisy equipment, such as compressors? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are there noise limits contained in your development consent? Are you satisfying your noise limits? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Are any pieces of equipment, motors or fans left running after business hours? Yes* ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you carry out noisy activities inside the building? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Can doors be closed to reduce noise from noisy activities ? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

RESOURCE EFFICIENCY

Complete the following to obtain baseline information on your utility use:

Cost of electricity $ _____ per month

Cost of water $ _____ per month

Cost of waste $ _____ per month

Other $ _____ per month

Total $ _____ per month

Do you have a team or 'champion' looking at on-going efficiency improvements? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you monitor raw material, electricity, water use and waste disposal? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have energy and water saving procedures and targets in place? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you use energy efficient motors? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you use water saving devices, such as fitting trigger nozzles on hoses? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you have a preventive maintenance program to make sure all machines are operating efficiently? For example, are air compressors regularly checked for leaks? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Have you installed insulation to avoid heating or cooling energy loss (e.g. insulation of roof, wall, piping, etc.)? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Do you use water-based products wherever possible? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

Have you investigated alternatives to the hazardous materials or dangerous goods you use? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

FOLLOW-UP

Do you have a system in place to follow up any concerns or actions that need to be addressed following this self-assessment? Yes ☐ No ☐ N/A ☐ Don't know ☐

Actions needed:

When you have completed this self-assessment checklist, go back over it and highlight the questions that you have answered with a:

'No'

'Don't know' or

'Yes*' (with an asterisk)

You have identified these questions as areas where you need to undertake further research, make improvements, or take immediate follow-up action. It's recommended that you:

- Refer back to any of the relevant information sheets within the guide to find more information
- Develop an environmental action plan
- Get started on an environmental improvement program that will be good for your business, your staff and your clients.

It's a good idea to keep completed self-assessment checklists for your own records.

The checklist can be downloaded from DECC's website **www.environment.nsw.gov.au**

ENVIRONMENTAL ACTION PLAN

SMASH REPAIR WORKSHOPS

Sample only – expand and adapt this to your situation.

ENVIRONMENTAL ISSUE	ACTION OR MEASURE	WHO IS RESPONSIBLE?	WHEN?
1. COMPLIANCE			
Meet legal obligations under environmental legislation	Ensure copies of your development consent and approvals are kept at hand.	Manager	Continual
	Develop daily and weekly checklists.	Manager	January
	Train staff to carry out daily and weekly checks on environmental compliance.	Manager	Continual
	Store all chemicals, oils and batteries in a bunded and covered area.	Manager	February
	Train staff and contractors/subcontractors on their environmental responsibilities while at work. This will include spill prevention, what to do in case of a spill and how to use a spill kit.	Manager	March
	All staff and contractors receive follow-up training in the workplace whenever new equipment is purchased or when there are significant changes to the workplace relating to environmental compliance.	Manager	When required
	Designated staff have been allocated overall responsibility for environmental emergencies, ensuring at least one trained staff member is likely to be present in the event of an emergency.	Manager	Review every six months

ENVIRONMENTAL ISSUE	ACTION OR MEASURE	WHO IS RESPONSIBLE?	WHEN?
2. RESOURCE EFFICIENCY			
	Clean dust extraction system filter bags regularly to reduce energy consumption.	Workshop staff	Weekly or as required
	Use nozzles that reduce paint overspray and rebound.	Workshop manager and staff	February
	Switch off lights and equipment when not in use.	Workshop staff	Daily or after use
	Investigate using water-based paints and less toxic alternatives for other chemicals.	Workshop manager	March
	Check with chemical suppliers to find out if empty containers can be returned.	Workshop manager	March
	Investigate using a solvent recovery unit.	Workshop manager	May
	Staff are trained in measures to reduce paint overspray and increase transfer efficiency.	Manager	Annually
	Air compressors are well maintained to reduce energy wasted through leaks.	Manager	Monthly
	Air compressors are turned off during extended periods of non-use and after hours.	Designated Staff	Daily
	Preference is given to purchasing energy efficient appliances and power tools wherever possible.	Manager	Continual
	Install clear roofing panels or skylights to reduce the use of artificial lighting.	Manager	February
3. MANAGING AIR QUALITY			
Prevent emissions of air pollutants to the atmosphere	Ensure that volatile liquids such as solvents are stored in containers with well fitting lids or with taps for dispensing.	Designated staff	Daily
	Limit engine operating times within the workshop to a minimum.	All staff	Daily
	Check spray booth filters are in good working order.	Manager	Monthly
	Check spray booth exhaust fans are in good working order.	Manager	Monthly

ENVIRONMENTAL ISSUE	ACTION OR MEASURE	WHO IS RESPONSIBLE?	WHEN?
	Ensure that spray booth complies with Australian Standards for design, construction and maintenance.	Manager	Annually
	High-volume/Low-pressure spray guns or airless spray guns are used to improve transfer efficiency when spray painting, to reduce paint use and solvent emissions.	Designated staff	Continual
	Work on vehicle air conditioners or refrigerators conducted by a technician holding a current national Refrigerant Handling Licence, and in accordance with the requirements and standards in the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995.	Manager	Check licence annually
	There is a maintenance plan in place for all extraction and filtration systems.	Manager	February
4. MANAGING WATER QUALITY			
Prevent pollutants entering the stormwater system	Provide clean-up equipment specifically designed to deal with small spills. A spill kit is to be placed at a conspicuous location and to be clearly labelled.	Manager	January
	Develop a 'step-by-step' guide to using the spill kit for small spills.	Manager	January
	Develop an emergency response procedure for large spills.	Manager	February
	Train all staff in the emergency response procedure and ensure all staff know where the written procedure is kept.	Manager	March
	All stormwater drains should be labelled 'Clean Water Only'.	Designated staff	March
	Check the bund surrounding the liquid storage area to ensure that it is in good condition and would contain spillage in the event of an emergency.	Manager	Monthly
	Set up a designated undercover area where car parts containing oil and chemicals – such as gearboxes, engines and radiators – can be stored.	Manager	March

ENVIRONMENTAL ISSUE	ACTION OR MEASURE	WHO IS RESPONSIBLE?	WHEN?
5. HAZARDOUS SUBSTANCES AND LIQUID WASTE			
	Provide training to employees on how to dispose of contaminated material, such as rags and used absorbents from the spill kit.	Workshop manager	Annually
	Ensure each MSDS for hazardous products are up-to-date and accessible at any time.	Designated staff	Monthly
	Where possible, use biodegradable, phosphate free and/or quick-break cleaning products, strippers and degreasers instead of solvents.	Manager	Review every six months
	Review the cost benefit of using ultrasonic parts cleaning where possible to minimise chemical use.	Manager	June
6. SOLID WASTE AND RESOURCE RECOVERY			
Prevent excess waste	Carry out a waste audit of your operations to find out how much waste is being generated.	Manager	April
	Review results of the waste audit and work out how waste can be eliminated, minimised, separated, reused or recycled.	Manager (with designated staff)	May
	Set quantified waste reduction targets (in volume, weight or costs).	Manager (with designated staff)	June
	Investigate waste avoidance options such as repair of parts instead of replacement.	Manager (with designated staff)	July
	Talk to your local Council waste officer about what can be recycled locally.	Manager	August
7. MANAGING NOISE			
Noise should not disturb neighbours	Maintain all equipment so it's running efficiently.	Workshop manager	Weekly
	Check whether operational noises can be heard outside your premises and trace the source of noise.	Workshop manager	Daily
	Ensure you operate within the hours approved by your local council.	Workshop manager	Monthly
	Locate equipment that generates noise away from doors and openings.	Manager	Monthly
	Install sound reduction measures such as mufflers, silencers, sound absorbing boxes or barriers around equipment where necessary.	Manager	December

DAILY AND WEEKLY CHECKLISTS

Sample only – expand and adapt these checklists to your situation.

DAILY CHECKLIST	TICK (✓)
All stormwater drains have been checked and they are clear of oil, chemicals and litter.	
All hazardous liquid containers are stored in a bunded and covered area.	
Floor areas have been checked for spills and drips. Spills and drips are cleaned up immediately.	
All parts and engines are stored in a bund or spill tray.	
All chemical containers have been checked for leaks. All lids are properly sealed.	
Waste storage areas are not overfull. Wastes cannot be blown or washed away by rain. All bin lids are down.	
Carried out by: Signed: Date:	

WEEKLY CHECKLIST	TICK (✓)
Daily checklists have all been completed.	
All bunds have been checked and any damage or anomalies reported to the manager.	
The spill kit/s have been checked and contain all necessary materials.	
The oil/water separator and collection pit alarm are functioning correctly.	
All compressors have been checked for leaks.	
A walk around of the outside of the premises has been done, during normal operating hours, to check for noise and odours. Any noise or odours have been reported to the manager.	
Liquid wastes are stored in separate containers and are correctly labelled.	
All spray painting is done inside a spray booth.	
Spare filters are available.	
The spray booth filters and exhaust fans have been checked.	
Carried out by: Signed: Date:	

USEFUL CONTACTS

Sample only – expand and adapt this list for your business.

ORGANISATION	TELEPHONE NO.
Emergency Services	000
Local Council	
Department of Environment and Climate Change NSW	131 555
NSW Workcover Authority	131 050
Poisons Information Centre	131 126
Local water authority/tradewaste contact	
Spray booth maintenance contractor	
Waste solvent recycler	
Waste disposal contractor	
General recyclers	

Department of **Environment & Climate Change** NSW

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