



Auto recyclers guideline

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Acknowledgments

This guide has been developed in collaboration with the Victorian Automobile Chamber of Commerce (VACC). Environment Protection Authority Victoria (EPA) gratefully recognises the contributions from VACC and its members.

Disclaimer

The information in this publication is for general guidance only and should not be relied on as a complete statement of your obligations or the law.

This guide does not constitute legal or other professional advice. You should obtain professional advice for your specific circumstances. Because it is intended only as a general guide, it may contain generalisations. EPA has made every reasonable effort to provide current and accurate information, but it does not make any guarantees regarding the accuracy, currency or completeness of that information. Other laws and regulations which are not administered by EPA also apply to the operation of auto recycling sites. It is your responsibility to ensure your operations comply with all applicable laws.



Important information

This guide has been developed to support the *Environment Protection Act 2017*¹ (EP Act) which will come into effect from July 2020. Regulations to support the EP Act will be available in early to mid-2020 and will provide more detail in some areas.

You can use this guide to help inform the decisions and steps you take to minimise and manage your risk. It contributes to what you ought to know about the harm, or risk of harm, to human health and the environment, and controls available to eliminate or reduce those risks.

For all EPA Victoria industry guidance, see: www.epa.vic.gov.au/for-business

¹ *Environment Protection Act 2017* as amended by *Environment Protection Amendment Act 2018*

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Glossary

The following definitions are provided for the purposes of this guideline only.

| Term | Definition |
|--------------------------------------|--|
| Accredited consigners | A person or company authorised by EPA Victoria to carry out certain functions on behalf of a waste producer. |
| Auto parts and vehicle exporter | A person or company that sends auto parts and/or vehicles to another country for sale. |
| Auto wrecker or recycler | Dismantles vehicles and/or buys, sells or exchanges auto parts or vehicles. |
| Bund | A raised, impermeable barrier forming the perimeter of a secondary containment system. It is commonly used where potentially polluting substances are handled, processed or stored, to contain any unintended escape of material from that area until remedial action can be taken. |
| Collection sump | A hollow or a depression on the floor into which liquids can drain off to and get collected. |
| Control | A specific activity undertaken to eliminate or reduce risk. |
| CRWM | Combustible recyclable and waste materials. |
| Dangerous goods | As defined in the Occupational Health and Safety Regulations, dangerous goods are substances that are corrosive, flammable, combustible, explosive, oxidising or water-reactive or have other hazardous properties. Dangerous goods can cause explosions or fires, serious injury, death and large-scale damage. |
| Emergency Management Plan | A written set of instructions that outlines what workers and others at the workplace should follow in an emergency. |
| End-of-life vehicle | A vehicle that is no longer usable. |
| EP Act | <i>Environment Protection Act 2017</i> as amended by <i>Environment Protection Amendment Act 2018</i> . |
| Equivalent Passenger Unit | An equivalent passenger unit (EPU) is a standard passenger car tyre. The weight of an EPU for a new standard passenger car tyre is standardised as 9.5 kg; and the weight of an EPU for an end-of-life standard passenger car tyre is standardised as 8 kg. |
| Full-service operator | Full-service salvage yard operators employ staff who remove parts from scrapped vehicles for the customer. |
| Hazard | Something that has the potential to cause harm. |
| Impervious spill containment surface | A solid surface through which fluids cannot pass when spilt (for example, a concrete pad). The surface is typically sloped toward the middle, or there is a lip, curb, or wall around the outer edges to keep spilt fluids from running or seeping off the pad onto the ground. The pad must be free of cracks, holes, drains, and other openings. Wood, gravel, soil and grass are not considered impervious. |

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| Term | Definition |
|------------------------------|---|
| Resource Recovery | Resource recovery, as defined in the EP Act, means <ul style="list-style-type: none"> • preparation for reuse of the waste • recycling the waste • reprocessing the waste • recovering energy or other resources from the waste • anything prescribed to be resource recovery in relation to waste—but does not include anything prescribed not to be resource recovery in relation to waste; |
| Risk | Is made up of two factors; likelihood which is the probability or chance that the hazard will cause harm and consequence which is the level of harm or severity of impact that a hazard can cause. |
| Secondary containment | Establishing an additional line of defence to prevent loss of containment in the event of failure of the primary containment systems (such as bulk storage containers and drums). |
| Self-service operator | Self-serve salvage yard operators allow the customer to remove their parts from scrapped (end of life) vehicles. |
| Stormwater | Surface water runoff captured from rain events. |
| Stormwater system | The gutters, drains and pipes that collect rain runoff and take it to the nearest creek, river, lake or bay. |
| Triple interceptor trap | A tank used to collect liquid waste prior to discharge to sewer. |
| Undercover area | An area sufficiently constructed (example walls, roofs) to prevent the ingress of water. |
| Victorian Building Authority | The Victorian Building Authority (VBA) regulates Victoria's building industry. The VBA promotes building practices that protect the community's health and safety. |
| Waste | Waste, as defined in the EP Act, includes any of the following: <ul style="list-style-type: none"> • matter, including solid, liquid, gaseous or radioactive matter, that is deposited, discharged, emitted or disposed of into the environment in a manner that alters the environment • a greenhouse gas substance emitted or discharged into the environment • matter that is discarded, rejected, abandoned, unwanted or surplus, irrespective of the potential use or value • matter prescribed to be waste • matter or a greenhouse gas substance referred to above that is intended for, or is undergoing, resource recovery. |
| Wrecking or recycling yard | A business where wrecked or decommissioned vehicles are brought, dismantled and their usable parts are sold for use in operating vehicles while the unusable metal parts, known as scrap metal, are sold to metal recycling companies. |

1 About this guide

1.1 What is this guide about?

This document provides clear guidance on practical measures that can be taken to prevent or minimise risk of harm to human health and the environment, as a result of auto recycling operations.

1.2 Why is this guide important?

The new EP Act will come into effect on 1 July 2020. A centrepiece of the new legislation is a general environmental duty (GED) which requires businesses and individuals conducting activities that pose a risk to human health and the environment to understand those risks and take reasonably practicable steps to eliminate or minimise them.

In an Australian first, the GED is criminally enforceable. The new EP legislation also gives additional powers to EPA, such as additional powers of surveillance and increased penalties for repeated waste offenders, to monitor and enforce compliance to the legislation.

Taking steps to implement the principles described in this guide will enable you to demonstrate that you have taken measures to manage your operations and prevent real or potential harm to human health and the environment.

1.3 Who should use this guide?





If you are an operator of a business involved in all forms of 'vehicle' parts recycling (i.e. cars, trucks, motorcycles, farm machinery and other industrial vehicles except boats), this guideline is relevant to you. This guideline also applies to a range of different sized operations; from small, low-cost operations to large, capital-intensive businesses. Some examples of industries that should refer to this guide include:

- auto recyclers
- businesses that break down or dismantle vehicles and warehouse the parts
- auto wreckers that take vehicles directly for crushing and sorting
- scrap metal dealers that handle end-of-life vehicles (ELVs)
- support services for the auto recycling industry (e.g. waste oil collectors and waste removers)
- full service and self-service yards
- metal recycling and scrap yards
- vehicle export operations.

This guide provides examples of reasonable steps you can take to prevent harm. It also outlines EPA's expectations of industry in complying with new environmental laws.

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The following symbols are used throughout this guideline to make it easier for you to use.

| What do these symbols mean? | |
|---|--|
|  | Important point to highlight |
|  | Website links and further reading |
|  | Risk control option |
|  | Focus on additional definitions, explanations and examples |

2 Risk management

Risk is present in all business activities. Understanding and managing risk is crucial.

[Assessing and controlling risk](#) (see EPA Publication 1695) in a structured way will help a business prevent harm to human health and the environment, comply with their legal obligations, and meet community expectations (figure 1).



| Step | Action | Description |
|------|--------------------|--|
| 1 | Identify hazards | What hazards are present that might cause harm |
| 2 | Assess risks | What is the level or severity of risk based on likelihood and consequence |
| 3 | Implement controls | What measures are suitable and available to the business to eliminate or reduce a risk |
| 4 | Check controls | Review controls to ensure they are effective |

Figure 1: Steps in controlling hazards and risks



Useful information

Table 1 provides a sample template that you can use to complete a simple risk assessment of your site. The [Managing your work areas](#) section (pg. 22 to 27) of this guide will also assist you to identify some of the hazards and risks in different work areas within your work site.

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Table 1: A sample template to complete a simple risk assessment at your site.

| Identify hazards | | Assess risks | | Implement controls | | | | | Check controls | |
|---|---|---|--|--------------------|--|---------------------------|----------|---------------|----------------|-----------------------------|
| Hazard (what could go wrong?) | Potential harm | Consequence (Severe, Major, Moderate, Minor, Low) | Likelihood (Certain, Very Likely, Likely, Unlikely, Rare) | Existing Controls | What further controls are required | Action by [Role Title] | Due Date | Date complete | Date of review | Effective/ Not effective |
| Example: Forklift impact could rupture or topple waste oil drums stored adjacent to stormwater drain | Waste oil can drain into the stormwater drain | Moderate (Medium level of harm to human health and environment) | Likely (Forklifts turn close to the storage area) | None | Investigate the possibility of relocating the waste oil storage area | Site Manager | dd/mm/yy | dd/mm/yy | dd/mm/yy | |
| Fire in the vehicle body storage area | Fire spreading throughout the worksite | Severe/Major (Harm to the environment, staff, equipment, stock, neighbouring properties) | Likely (small fires have occurred in the past) | | | | | | | |
| Storage of vaporising liquids in a way that generates odour | Loss of amenity | Minor/Low | Likely (vaporising of volatile liquids such as fuels is common) | | | | | | | |

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2.1 Common hazards in the auto recycling industry

Activities undertaken by the auto recycling industry can adversely impact the environment and human health if not managed correctly. Below are examples of common hazards (or things that could go wrong) arising from auto recycling activities:

- Contamination of groundwater, surface water and soil from oils, grease, fuel, solvent and other chemicals (battery acids) due to poor management practices:
 - Incorrect disposal of oils and other contaminants to the stormwater system.
 - Many sites lack impervious surfaces, covered areas and appropriate stormwater infrastructure to prevent contaminants such as fuel, oil, coolant and other chemicals from entering soil and surface water. Many sites also store oily engine parts outside on unsealed surfaces or leave the parts out the front next to a stormwater drain.
 - Lack of proper spill control management allows liquid spills to enter stormwater systems and contaminate soils.
- Improper drainage of fuel and other liquids from ELVs, which gets released into the environment during processing of the vehicles.
- Loss of amenity in and around the site due to:
 - Increased noise and vibration from activities that generate high impact high-intensity noise and vibration.
 - Air pollution and odour issues as a result of dust, fumes and particulates from burning, as well as fuel odours from vehicle processing.
- Increased fire risk due to:
 - Stockpiling of flammable material such as waste tyres and unprocessed auto bodies.
 - Use of equipment such as oxy cutters which generate sparks.

The table below summarises the common activities, pollutant sources and associated pollutants at auto parts recycling facilities.

Table 2: Common activities, pollutant sources and associated pollutants at auto parts recycling facilities.

| Activity | Pollutant source | Pollutants |
|--|---|---|
| Temporary storage area (outdoor vehicle and equipment storage) | Leaking engines, chipping/corroding bumpers, chipping paint, galvanised metals | Oil and grease, arsenic, organics, heavy metals, total suspended solids |
| Air conditioning and Refrigerated Gas recovery | Leaking air conditioning units | Chlorofluorocarbons (CFCs), Hydrochlorofluorocarbons (HCFCs), Hydrofluorocarbons (HFCs) |
| Vehicle dismantling | Oil, antifreeze, batteries, fuel, hydraulic fluids, electrical switches | Oil and grease, ethylene glycol, heavy metals, mercury |
| Used parts storage | Batteries, chrome bumpers, tyres, filters, radiators, engine blocks, doors, drivelines, galvanised metals, mufflers | Sulphuric acid, galvanised metals, oil and grease, heavy metals, petroleum hydrocarbons, total suspended solids |
| Vehicle equipment and parts washing area | Washing and steam cleaning waters | Oil and grease, detergents, heavy metals, chlorinated solvents, phosphorous, salts, suspended solids. |

2.2 Controlling hazards and risks

Like any other business risk, you can assess and manage the risk of harm to human health and the environment resulting from your site activities using a risk management approach. A risk assessment will help you to identify and assess your risk and assist you with identifying and implementing appropriate controls to eliminate or mitigate those risks.

Every auto recycling business is different, so therefore risks may vary. By understanding your activities onsite, the right actions can be taken to control them.

When assessing the risk of harming the environment, it is helpful to think about how pollution and waste from your activities can travel off your site and reach neighbouring people and the environment – noise, air, land, water (figure 2).

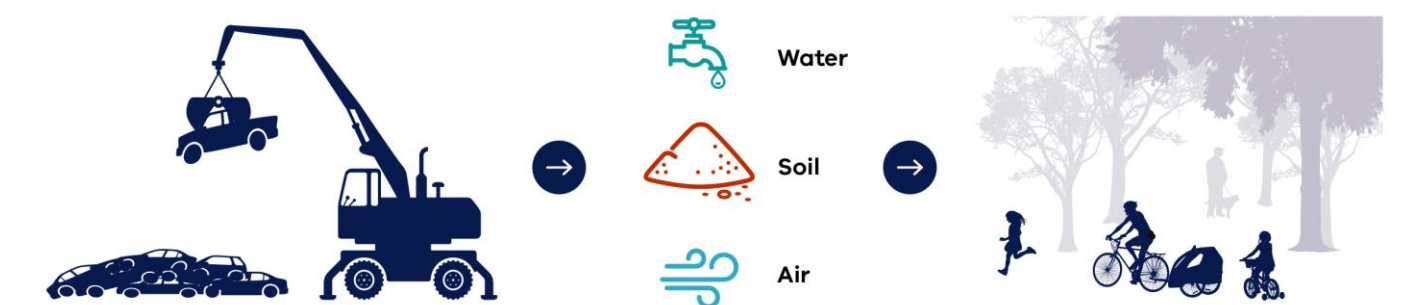


Figure 2: Model for how pollution and waste from auto recycling activities can reach people and the environment

| | | |
|--|----------------------------|--|
| | Further information | <p><i>Assessing and controlling risk: A guide for business</i> (EPA publication 1695) includes a useful step-by-step guide to risk management. This risk management framework can be applied to any auto recyclers site.</p> <p>The section Managing your work areas section of this guide (pg. 22 to 27) will also assist you to identify some of the hazards and risks in different work areas, the potential controls that can be implemented and the methods to check the controls.</p> |
|--|----------------------------|--|

3 Setting up your site and business

3.1 Site design

When designing your site, it is important to consider the potential environmental risks associated with auto recycling activities to determine preventative controls that can be included in the site layout and design. One of the significant environmental risks from this industry is the risk to water (surface and ground) and contaminated land. Figure 3 shows some of the common work areas found in a typical auto recycling yard. Dedicating a certain area on your worksite to a particular activity will help you establish control methods to prevent harm to human health and the environment from the specific operations carried out within that area.

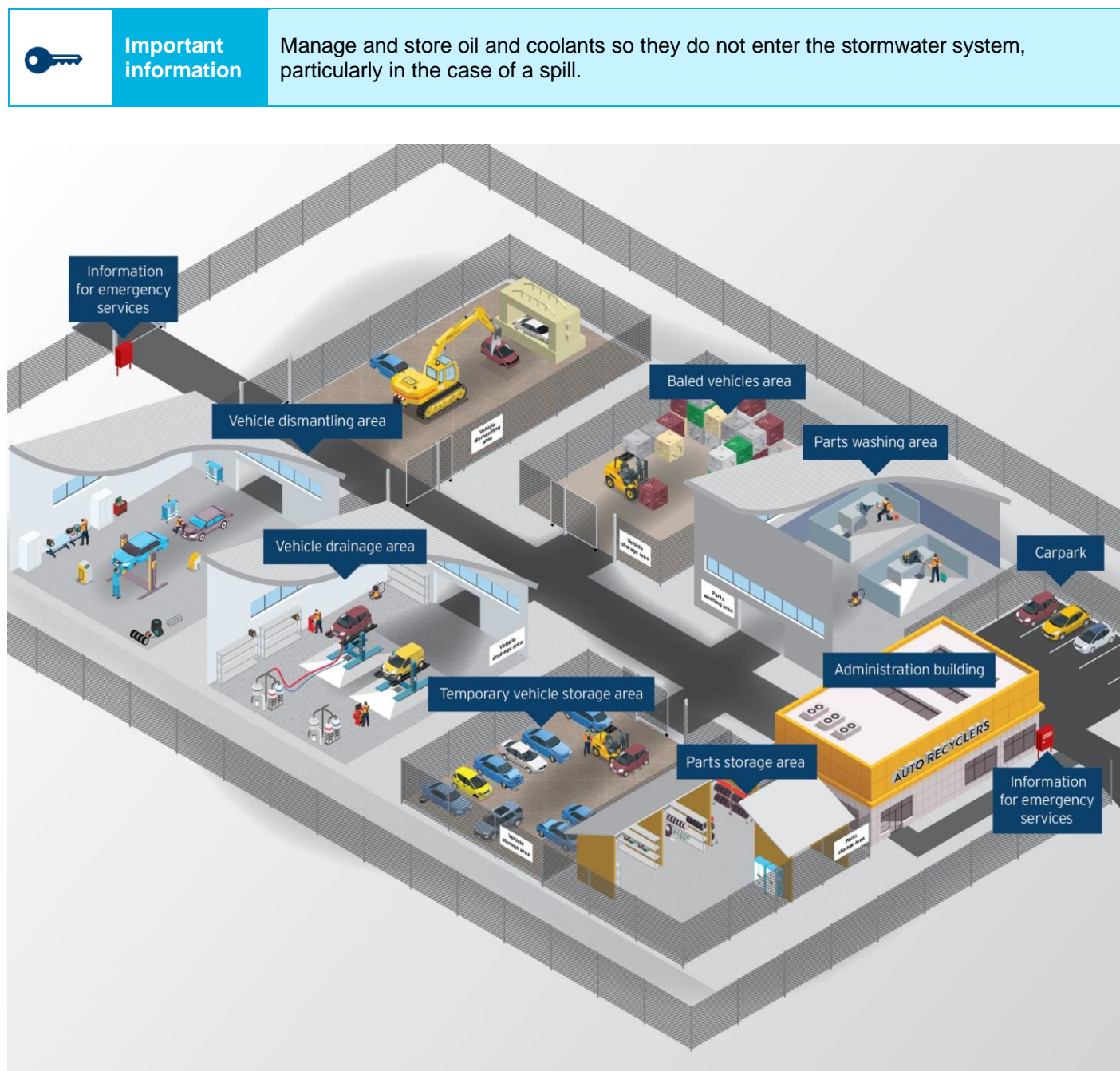


Figure 3: Site plan showing different work areas typically found in an auto recycling work site



Additional examples

The **Managing your work areas** section of this guide (pg. 22 to 27) will assist you to identify some of the hazards and risks in different work areas within your work site.

When planning the layout of your site:

3.1.1 General precautionary measures:



- Consider your site set up, for example installing triple interceptor traps, installing undercover areas (i.e. not exposed to rainfall), and impervious surfaces.
- Consider the potential risk of fire and occupational health and safety when allocating activities to designated areas.
- Allocate enough space to store flammable material such as fuel, tyres, batteries etc. away from ignition sources. Refer to the information provided by WorkSafe for [proper storage and handling of dangerous goods](#).
- Provide accessways that allow forklifts to access all vehicles stacked within the site. In larger sites, provide enough space to allow movement of firefighting equipment.
- Consider developing a traffic management plan to ensure the correct flow and management of material handling equipment (MHE) and pedestrian interaction on site.

3.1.2 Access points:



- Identify two access points to enter/exit the site. This will aid in the case of an emergency such as a fire, by enabling evacuation of personnel, removal of material and additional access for emergency services. Note: the second access point does not have to be available all the time. It could be accessed from a neighbouring property upon agreement.

3.1.3 Stormwater considerations:



- Identify where your stormwater drains are and ensure they are isolated and/or protected to reduce the risk of liquid and solid material from entering the stormwater system. You can conduct in-drain monitoring regularly to ensure your drainage systems are structurally isolated.
- Use suitable systems that ensure only clean water enters the stormwater system. Some commonly used systems include first flush systems, triple interceptor traps or oil/water separator systems.
- Divert stormwater away from part storage areas, vehicle dismantling areas and any other areas where materials may accumulate.

3.1.4 Amenity:



- Consider strategies to avoid or minimise amenity impacts on neighbouring sites and the surrounding environment including litter, noise, dust, odour, and stormwater.

3.1.5 Other regulators:



- You should also take into consideration additional requirements from other regulatory agencies such as the local council when planning the layout of your site. Some local councils have specific instructions, for example on landscaping, carpark areas and fencing. Also, consider WorkSafe requirements for the storage and handling of dangerous goods and occupational health and safety.

3.2 Good housekeeping

Implementing good housekeeping practices on your site allows you to keep your business clean, well-organised and well presented. Some suggestions for good housekeeping practices include:

- reducing the amount of clutter onsite to improve the presentation of your site
- removing material and equipment which are no longer required onsite
- organising storage equipment and material to improve work efficiency by reducing the time spent looking for equipment and material
- establishing a daily/weekly clean-up schedule.

Implementing these practices will assist you to:

- prevent workplace injuries due to slips, trips and falls
- reduce the attraction of pests (rats, birds, insects)
- reduce the likelihood of a fire occurring on site
- reduce the likelihood of offsite impacts such as litter, odour, water, soil and groundwater contamination
- improve working conditions for staff.



Further information

Refer to the [Appendices](#) section (pg. 42 to 45) at the end of this guideline for examples of daily and weekly checklist templates.

3.3 Information and records management

3.3.1 Maintaining an inventory

Maintaining an inventory (i.e. a complete list of items such as goods in stock, or the contents of a building) will give you a clear idea of the vehicles that have been processed through your site. If you are a self-serve auto parts operator, an inventory will be a useful tool that you can offer to your customers to make their search for parts more efficient. There are easy to use and free inventory software that you can access online. Maintaining an inventory will also give your business the ability to measure the value of your contribution to recycling and the environment.

Below is some useful information that you can include in the inventory:

- Vehicle reference number:
- VIN:
- Make:
- Model:
- Colour:
- Engine power:
- Transmission:
- Year:
- Odometer:
- Date in stock: (the date when the vehicle was entered into the system)
- Parts available:
- Photographs:

3.3.2 Maintaining records

Proof of good records and management systems are now a requirement by many regulators including but not limited to the Australian Tax Office, Consumer Affairs Victoria, WorkSafe, EPA and Fair Work. This practice is also an essential part of good site management and confirms adherence to regulatory requirements.

Some suggestions for areas you should maintain records include:

- waste management services
- trade waste agreements
- waste transport certificates – maintain the relevant records as evidence to show that your waste was transferred to a lawful place
- staff training and induction records
- environmental incidents and procedures followed in response to regulatory advice
- vehicle purchasing information asset and/or equipment registers – to maintain and manage all equipment used by operators that may impact their safety if not serviced regularly and or repaired promptly e.g. forklifts, hoists, compressors etc.

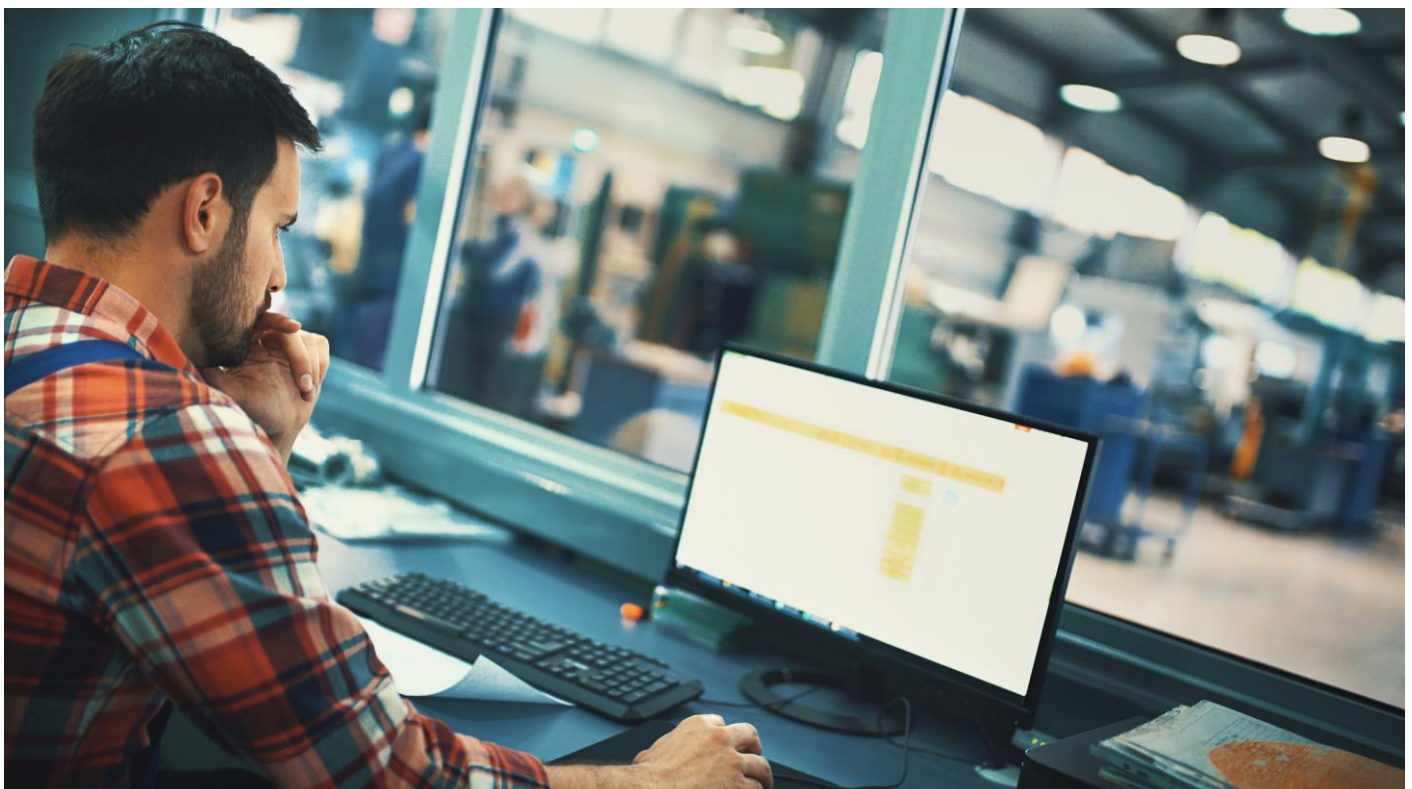


Vehicle purchasing information

Under reforms to the *Second-Hand Dealers and Pawnbrokers Act 1989* and the *Second-Hand Dealers and Pawnbrokers Regulations 2018*, scrap metal dealers and auto wreckers are now:

- banned from paying or receiving cash payments
- banned from possessing or trading an unidentified motor vehicle, and
- required to keep detailed records of all transactions involving scrap metal.

Maintaining records of vehicle purchases and other transactions will allow you to demonstrate your compliance with this regulation.



3.4 Stormwater system management

It is important to ensure that the contaminants or water from your site that is potentially contaminated with oil, grease and other chemicals do not enter into the stormwater system. Stormwater drains eventually connect into larger water bodies such as rivers and the bay (ocean). If the stormwater that is drained from your site contain contaminants such as oil, grease and other chemicals, they can be extremely toxic and dangerous to the organisms living in these water bodies. If contaminants from your site enter the stormwater system you can face significant penalties.

It is important that you create and maintain a readily accessible and available drainage map (figure 4) that details activity areas, drains, stormwater drains, stockpiles and their contents, fire hoses, fire extinguishers, entrances and exits, and other waste storage areas.

Identifying where your stormwater drains are will assist you during an emergency where you may need to isolate the site to prevent contaminants from entering the stormwater system

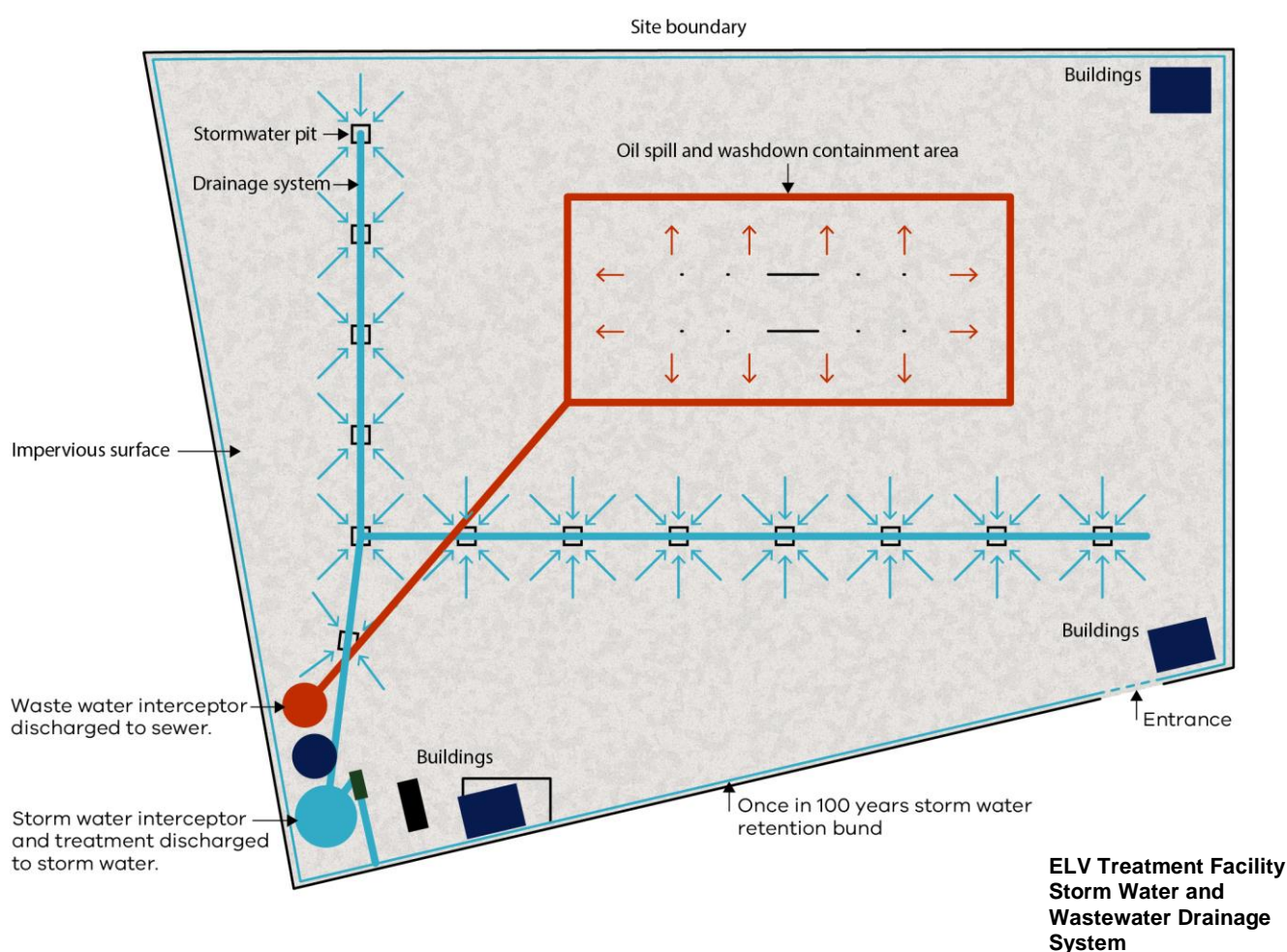


Figure 4: Example of a drainage plan



Further information

Refer to [Reducing stormwater pollution: A guide for auto repairers, auto detailers and car yards](#) (EPA publication 980) for more information on precautions that you can take to prevent stormwater pollution.

3.5 Preparing for fire

The possibility of a fire at an auto recycling yard is high mainly due to the highly flammable nature of vehicle fluids and other flammable materials that are handled and stored. The environmental consequences of a fire can be significant; firewater runoff, combustion products and fire-fighting chemicals can contaminate surface water and ground water, smoke, likely to be toxic can have significant adverse impact on air quality. Therefore, you should ensure that you take maximum precautions to prevent the occurrence of fire (fire prevention) and have procedures in place to extinguish and prevent the spread of a fire if it does occur (fire mitigation). Taking these precautions and being prepared will help you reduce the impact of fire on your business as well as the environment and human health.

3.5.1 Fire prevention and mitigation

Controls to consider for preventing and mitigating fires at your site can include (but not limited to) the following types of engineering and administrative controls.

3.5.2 Engineering controls

3.5.2.1 *Effective storage management*

- Store flammable material away and separate from ignition sources.
- Implement recommended storage dimensions to prevent oversized and hard to manage piles. See the [Storage dimensions for scrap auto bodies](#) section in this guide (pg. 20) for more information.

3.5.2.2 *Monitoring hazards*

- Install security systems such as closed-circuit television (CCTV) to monitor the sites for illegal dumping, vandalism, and arson.
- Install early fire detection devices such as external thermal alarms and/or sensors, video smoke detection and flame detection.

3.5.2.3 *Site arrangement*

- Designate and maintain separate areas for different activities.
- Designate and maintain areas for flammable material away from ignition sources such as hot works.
- Secure your property and perimeter fence, install quality gates and bollards, install CCTV and static covert cameras that deter and reduce the chances of criminal activity at your site.
- Install hot works response equipment as required (e.g. permanent or temporary heat shielding to contain sparks and flames within the designated area).
- Create and maintain a readily accessible and available site map that clearly details activity areas, stockpiles and their contents, fire hoses, fire extinguishers, entrances and exits, and other waste storage areas.

3.5.2.4 *Fire protection systems*

- Install fire protection systems such as hydrants, fire water monitors, fire sprinklers to respond to fire hazards on the site. Install fire sprinklers to wet areas in case of a fire.
- Ensure that there is adequate water supply and pressure to combat a high-risk fire. Where town water is not available, provide static water tanks with an adequate water supply to fight a high-intensity fire. Adequate water supply will depend on the size of your site and the size of your stockpiles onsite. You will need to speak to your local fire authority for further information and guidance.
- Install fire warning systems (e.g. bells alarms, alarm signalling equipment) that can be manually or automatically triggered.
- Make first aid firefighting equipment (e.g. fire extinguishers, fire hose reels) available and ensure that they are accessible and in working order.
- Have firefighting support equipment (e.g. excavators) available onsite to separate burning materials or build containment ponds.

3.5.2.5 Fire water containment (*Liquid water runoff management*)

- Install bunding, drainage basins or catchment pits to contain firefighting water within the premises.
- Have contingency plans in place to divert firefighting water from storm drains to sewers.
- Consider using sand instead of foam/water to extinguish fire.
- Consider using eductor pumps to pump firewater offsite for disposal.
- Monitor the waterways after a fire event.

3.5.2.6 Administrative controls

- Maintain good housekeeping practices (see the [Good housekeeping](#) section (pg. 15) in this guide).
- Ensure that a mandatory hot works permit procedure is in place for all activities that could cause a fire such as cutting, welding and grinding type activities.
- Apply for independent fire services inspections and/or Metropolitan Fire Brigade (MFB)/Country Fire Authority (CFA) inspection.
- Ensure all electrical and heat causing equipment used in operations and administration are maintained as required and used per manufacturers standards and organisation safety and standard operating procedures.
- Ensure heating, ventilation, exhaust and air conditioning systems are shut down after hours.
- Carry out routine service of fire protection equipment and firefighting equipment by individuals considered competent by Victorian Building Authority (VBA) recognised qualifications or industry accreditation schemes such as Fire Protection Accreditation Scheme.
- Review and update safety documents and standard operating procedures in a timely manner when introducing new equipment or tasks to the site/ in the event of a fire.
- Restrict smoking to designated areas and establish a no open fire policy.
- Make arrangements to access offsite firefighting equipment prior to an incident occurring if you expect to use equipment from a neighbouring operation.
- Train your staff in proper handling of firefighting equipment and maintain records of the training sessions.
- Maintain adequate supplies of Personal Protection Equipment (PPE) on-site such as self-contained breathing apparatus for the use of your staff trained in proper use of such equipment, in case of a fire.



Further information

You can access additional information on preparing for fire through the CFA website.



Important information

Waste Management Policy (Combustible Recyclable and Waste Materials) and [Management and storage of combustible recyclable and waste materials – guideline](#) (EPA publication 1667) are applicable to auto recycling yards. Please refer to the CRWM Guideline for more details on managing your combustible, recyclable and waste materials in a manner that minimises the risk of harm to human health and the environment from fire.

3.6 Storage dimensions for scrap auto bodies

Auto recycling sites are considered facilities that store combustible recyclable and waste materials (CRWM). Regardless of the size of the operation, all facilities storing CRWM outdoors or indoors are required to take all reasonable steps to manage and store CRWM in a way that minimises the risk to human health and the environment from fire.



Important information

Unprocessed auto bodies that have not been stripped of their combustible materials such as tyres, plastic body parts, internal fittings which include rubber, carpet, seats and dashboards and therefore are considered a CRWM. When a car has been fully stripped of all combustible materials and consists purely of metal, it is no longer considered a CRWM.

Pile height, length and width are key determinants of the severity, duration and intensity of fire. In most cases, the planning guidelines issued by your local council will contain information on the stockpile dimensions allowed on your worksite. If you have not been provided with specified stockpile dimensions, consider those below. These are dimensions commonly adopted by the auto parts industry.

- Maximum height for a stockpile of any type of scrap auto body (unprocessed, semi flats, flats) is 6 metres. This will allow a height of:
 - up to 4 car bodies of unprocessed cars
 - up to 6 semi flat car bodies
 - up to 10 flattened car bodies in one pile.
- Maximum width is 20m and the length 45m for a stockpile of any type of scrap auto body (unprocessed, semi flats, flats).
- Cross stack or interlock vehicles to provide stability for car layers.
- Provide access from three sides of the stockpiles for firefighting actions.
- Allow access for firefighting equipment (e.g. fire hydrants, fire extinguishers etc.).
- Maintain a minimum separation distance of 6 metres between two adjacent stockpiles or a stockpile and an adjacent building or wall².



Important information

- The storage dimensions listed above will not satisfy the requirements provided in the CRWM Guideline [Management and storage of combustible recyclable and waste materials – guideline](#) (EPA publication 1667).
- The pile dimensions listed reflect current operating practices and take into consideration the size and constraints associated with auto recycling sites.
- If adopting these dimensions, you will need to apply additional fire prevention and mitigation controls (as outlined in the [Preparing for fire](#) section (pg. 18-19) in this guide) to ensure that the level of fire risk at your site is at least or at an equivalent level to that outlined within the CRWM Guideline.
- To determine the extent of additional controls required it is recommended that you consult your local firefighting authority or seek the assistance of a fire safety engineer.

² The dimensions take into consideration the size of auto part recycling sites and therefore the separation distance of 6 metres between piles is less than the recommended separation distance outlined within *Management and storage of combustible recyclable and waste materials – guideline* (EPA publication 1667) (CRWM Guideline).

3.7 Staff training

Providing adequate staff training will ensure that the operations at your site are performed in the most efficient, cost-effective manner. It will also inform and remind your staff of the procedures that are in place to reduce the negative impacts on human health and the environment through the operations carried out at your worksite.

Auto recycling sites handle substances that are categorised as hazardous (e.g. fuel, coolant, batteries, air conditioning refrigerant). Therefore, your staff should be provided with information, instruction and training on hazards and risk associated with the handling and storage of these substances. In addition to this, other persons on site (contractors, maintenance workers, administrative staff and visitors) should also be made aware of the associated risks and trained on precautions to be taken. This information can be a part of their induction process.

It is important to consider incident management training as a component of staff training schedule. Some suggestions to include in the training program are:

- the incident management plan and how to respond to an incident
- small scale incident management, including:
 - incident prevention procedures for liquid spills, handling and storage
 - clean up procedures if a spill does occur, for example spill kits
 - regular rehearsals of the [emergency management action plan](#) (pg. 41)
 - training in the handling of industrial tools such as forklifts, grinders, welders, cutters etc.



When developing training materials for your site, you should:

- Identify who needs to be provided with information, instruction and training. You should have at least one trained person onsite at all (operating) times, so it may be necessary to train more than one person to cover leave, illness, etc.
- Decide what information, instruction and training are to be provided, when and how it is to be done and keep a record of training provided.
- Decide who will prepare and provide information, instruction and training.
- Provide information, instruction and training, and keep relevant records (including lists of staff that have been trained and when).
- Review any information, instruction and training provided to see how effective and useful it was. Check with your industry association or other similar organisations to understand what might be relevant and available to you.
- Update the training material as necessary and provide refresher training regularly. Refer to the [Appendices](#) section (pg. 42 to 45) in this guide for an example of a staff training schedule template.





4 Managing your work areas

Auto recycling sites typically have designated areas for different types of activities, which in turn, have specific considerations and requirements about managing and controlling risks to human health and the environment.

4.1 Temporary storage area for vehicles

- Provide a designated area for temporary storage of vehicles intended for recycling or before receiving treatment.
- Avoid dismantling or removing hazardous material from vehicles in the temporary storage area.
- Inventory vehicles before they are moved from temporary storage.



| | |
|---|--|
|  | <p>What can go wrong?</p> <ul style="list-style-type: none">• Liquid leaks (e.g. oil, fuel, coolant) from stored vehicles.• Stormwater contamination. |
|  | <p>What are the consequences?</p> <ul style="list-style-type: none">• Contamination of land, surface water and groundwater. |
|  | <p>What can you do to reduce or prevent risks?</p> <ul style="list-style-type: none">• Have a hard surface that prevents any leaks and spills from leaching into the groundwater. If a vehicle is actively leaking liquid, place it on an impervious surface.• Provide easy access to a spill kit to clean up any spills quickly.• Locate this work area away from stormwater drains.• Issue clear instructions to staff to not dismantle or depollute vehicles in this area.• Equip the area with a blind sump to collect any accidental spills. |
|  | <p>What ongoing actions can you take?</p> <ul style="list-style-type: none">• Conduct regular site inspections.• Consult with staff. |



Auto recyclers guideline

4.2 Vehicle drainage area

- Move vehicles to this area from temporary storage and then drain completely free from liquids such as fuel, engine oil, coolant and other liquids.
- Remove rubbish and hazardous materials such as batteries and refrigerant gas from the vehicles while stored in this area.
- Use a vehicle hoist and appropriate tools and equipment to make the work more efficient.



| | |
|--|---|
| | <p>What can go wrong?</p> <ul style="list-style-type: none"> • Liquid leaks (e.g. oil, fuel, coolant) from stored vehicles. • Stormwater contamination. |
| | <p>What are the consequences?</p> <ul style="list-style-type: none"> • Contamination of land, surface water and groundwater. |
| | <p>What can you do to reduce or prevent risks?</p> <ul style="list-style-type: none"> • Locate this work area to an undercover location with secondary containment or bunding to prevent contaminants from washing away into stormwater systems. • Have an impervious surface to prevent any leaks and spills from leaching into the groundwater. • Provide easy access to a spill kit to clean up any spills quickly. • Locate away from the stormwater drains. • Issue clear instructions to staff to not dismantle or depollute vehicles in this area. • Equip the area with a blind sump to collect any accidental spills. • Collect liquids into clearly labelled, secure drums or tanks and stored in bunded areas that are undercover until collected by a permitted waste transporter. • Put controls in place to manage the spread of oil outside containment areas from forklifts and foot traffic. • Please see the Liquid storage and handling guidelines (EPA publication 1698) for more details on proper methods of liquid storage and Worksafe's code of practice for the storage and handling of dangerous goods for practical guidance on how to comply with your obligations under Victoria's occupational health and safety legislation for the safe storage and handling of dangerous goods. |
| | <p>What ongoing actions can you take?</p> <ul style="list-style-type: none"> • Conduct regular site inspections. • Check the drainage machinery regularly for any leaks or malfunction. • Check the containers that store the drained liquids regularly for any leaks or spills. • Consult with staff. |








Auto recyclers guideline

4.3 Vehicle dismantling area

- Restrict vehicle dismantling to a pre-designated area due to safety and environmental reasons.
- Put controls in place to minimise the risk to environment and human health.



| | | |
|---|----------------------------|---|
|  | Further information | Refer to the noise and air information (under the Other things to consider section (pg. 39 to 40) in this guide for control methods that can be used to manage the excessive noise and dust that can be generated when dismantling vehicles. |
|---|----------------------------|---|

| | |
|---|---|
|  | What can go wrong? <ul style="list-style-type: none"> • Liquid leaks (oil, fuel, coolant etc.) from stored vehicles. • Dust. • Noise and vibrations. |
|  | What are the consequences? <ul style="list-style-type: none"> • Contamination of land, surface water and groundwater. • Loss of amenity due to increased noise, vibrations and dust. • Potential fire risk due to spilt fuel. |
|  | What can you do to reduce or prevent risks? <ul style="list-style-type: none"> • Locate this work area to an undercover location with bunding to prevent contaminants from washing away into stormwater systems. • Have an impervious surface to prevent any leaks and spills from leaching into the groundwater. • Provide easy access to a spill kit to clean up any spills quickly. • Locate away from the stormwater drains. • Equip the area with a blind sump and triple interceptor pits to collect any accidental spills. • Explore methods to reduce excessive noise and disturbance to community (e.g. controlled work hours). See EPA guidance on noise for more information. • Put controls in place to manage spread of oil outside containment areas from forklifts and foot traffic. |
|  | What ongoing actions can you take? <ul style="list-style-type: none"> • Conduct regular site inspections. • Check the machinery for malfunctions that can pose a safety risk and create excessive noise. • Consult with staff. |







Auto recyclers guideline

4.4 Parts washing area

- Use parts washing area to hose down body parts and whole vehicles (if large enough). Parts may include engines, transmitters, alternators, radiators, and body panels.
- Put control methods in place to minimise the risk to human health and the environment.



| | |
|---|---|
|  | What can go wrong? <ul style="list-style-type: none">• Liquid contaminants such as oil, coolant, or fuel leaking into the environment. |
|  | What are the consequences? <ul style="list-style-type: none">• Contamination of land, surface water and groundwater. |
|  | What can you do to reduce or prevent risks? <ul style="list-style-type: none">• Locate this work area undercover.• Provide an impervious surface to prevent any leaks and spills from leaching into the groundwater.• Provide provisions to the wash basins to contain overspray (e.g. short walls along the periphery).• Area should be bunded and drained to a triple receptor (water–oil separator unit) to prevent contaminants from washing away into stormwater systems.• Liquid waste containing solvents, oil or grease must be appropriately disposed of.• Liquid waste can be transported, treated and disposed of by appropriately permitted agents.• Contact the local water authority for specifications and any requirements for trade waste agreements. |
|  | What ongoing actions can you take? <ul style="list-style-type: none">• Clean and maintain the triple interceptors regularly.• Conduct regular site inspections. |

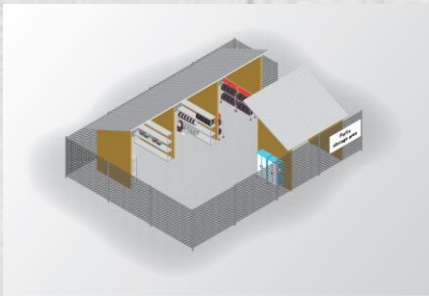






Source: Central Auto Parts

4.5 Parts and vehicle body storage area

Store recovered auto parts appropriately in a designated area

- Store parts (in particular, the engine block and running gear) undercover, and preferably racked off ground.
- Store the hull of the vehicle without the engine block and running gear outside and stacked to a maximum height of 6m (see the [Storage dimensions for scrap auto bodies](#) section in this guide (pg. 20) for more information).
- Control methods should be put in place to minimise the risk to human health and the environment.



| | |
|---|--|
|  | <p>What can go wrong?</p> <p>Residue liquid contaminants such as oil, coolant, fuel etc. in the parts leaking into the environment.</p> |
|  | <p>What are the consequences?</p> <p>Contamination of land, surface water and groundwater.</p> |
|  | <p>What can you do to reduce or prevent risks?</p> <p>Drain all parts completely of liquids before they are moved to the storage area to prevent release of contaminants to groundwater and stormwater through any leaks.</p> |
|  | <p>What ongoing actions can you take?</p> <ul style="list-style-type: none">• Clean and maintain the triple interceptors regularly.• Conduct regular site inspections. |







Auto recyclers guideline

4.6 Baled vehicle area

Baled vehicles can be stored onsite until they are transferred to the scrap metal dealer.



| | |
|---|--|
|  | What can go wrong? <ul style="list-style-type: none">• Flammable material contained in the bales can catch fire.• Residue liquid contaminants in the spare parts can leak into the environment. |
|  | What are the consequences? <ul style="list-style-type: none">• Significant risk of fire.• Risk of contamination of land, surface water and groundwater. |
|  | What can you do to reduce or prevent risks? <ul style="list-style-type: none">• Implementing fire mitigating and fire management processes (refer to Management and storage of combustible, recyclable and waste materials - guideline (EPA publication 1667) for additional information).• Store baled vehicles away from hot works areas and other ignition sources. |
|  | What ongoing actions can you take? <p>Conduct regular site inspections and check the fire mitigation and management processes in place.</p> |



5 Managing your recycled materials

Activities undertaken by the auto recycling industry can have significant impacts to human health and the environment. As such, it is crucial that you eliminate or reduce these impacts on manage any residual adverse impacts appropriately. Outlined below are some of the storage and transport control methods for different types of recycled materials generated at auto recycling sites.

5.1 Waste oil/used oil

Examples of waste oils include:

- used engine (sump) oil
- gear oil
- differential oil
- automatic transmission fluid/hydraulic oil
- brake fluid and other related products e.g. used oil filters.



Important information

Waste oils should never be tipped down stormwater drains or sewers, tipped onto soil or burnt. One litre of oil can contaminate up to one million litres of water.



Figure 5: Clearly labelled waste oil and other liquid containers at an auto recycling site

5.1.1 Potential hazards

Waste oils contain materials and properties that may harm human health and the environment if not managed properly. Examples of potential hazards are as follows:

- fire and explosion due to combustible nature
- slippery surface if spilt
- potentially toxic chemicals that can cause skin irritation or other health issues
- contamination of stormwater, land, surface water and groundwater.

5.1.2 Storage

- Store waste oils:
 - In clearly labelled, good-quality bulk tanks or drums in an enclosed (bunded) area, preferably under a roof, or on spill containment pallets or other self-bunded storage units (figure 5). If a roof is not provided, the containers should be enclosed to ensure that rainwater is not able to get in. Fit tanks with a graduated dipstick or a similar device that would allow the operators to assess the volume of liquid stored in the tank easily.
 - In a double-skinned tank which already has integrated bunding and offers appropriate spill protection.
 - In a separate designated area with a flat, impervious surface.
 - Away from heat and potential ignition sources and stormwater drains.
- Ensure that waste oil containers are not cut with any heat-producing equipment.
- Spill kits should be readily available in the waste oil storage area.
- Ensure that the waste oils are regularly collected by waste oil contractors to avoid build-up of large volumes of oil onsite.
- Display Hazchem sign at front of the entrance.



Further information

Refer to [Motor vehicle repair and service premises](#) (EPA publication IWRG642) and the Sustainability Victoria [Fact sheet – Improving Resource Recovery Centres – Motor oil and cooking oil](#) for more information on waste oil.

You can also refer to [Liquid storage and handling guidelines](#) (EPA publication 1698) for more information on proper methods of storing liquids.

5.1.3 Transport, recycling and disposing of waste oils

Use an appropriately permitted transporter for proper disposal or recycling of waste oil.

- Dispose of waste oils using an appropriately permitted transporter accompanied by transport documentation and ensure it is taken to a lawful place.
- Recycle used oil filters, do not dispose into landfill.



Important information

It is the responsibility of the auto recycling site operator to ensure that all waste (including waste oil) generated at the site are transported, recycled or disposed of appropriately. Therefore, practice caution when hiring a contractor to dispose of your waste oil. Check that they hold the required permits and maintain copies of waste transport certificates and other transaction records.

5.2 Coolant

Coolants (including radiator fluid) contain different types of glycol and other chemical compounds such as rust inhibitors, pH buffers and anti-foaming agents. Some of these chemical compounds can contain heavy metals such as lead and copper.



Figure 6: Coolant need to be collected from the vehicles and stored appropriately to minimise environmental risk

5.2.1 Potential hazards

If released to the environment:

- The heavy metals in coolants can cause significant contamination of soils, groundwater and other water bodies.
- Glycols present in coolant will use an excessive amount of readily available oxygen in soil and water for their biodegradation process and this will reduce the oxygen available for plants and animals.

5.2.2 Storage

- Store all coolant liquids collected from the vehicles in good quality containers in a secondary containment area (bunded) area, preferably under a roof, or on spill containment pallets or other self-bunded storage units. If a roof is not provided, the containers should be enclosed to ensure that rainwater is not able to get in. See [Liquid storage and handling guidelines](#) (EPA publication 1698) for more information.
- Collect and treat coolant separately from other liquid waste.

5.2.3 Transport, recycling and disposal of coolant

- Contact your local water authority, regarding the ability to dispose of coolant into the sewer.
- If you do not have a trade waste agreement with the local water authority, then contact an appropriately permitted transporter to arrange collection, transport and disposal of the collected coolant.
- Coolants should never be allowed to enter stormwater systems, any other water body or dumped on the ground.
- Do not allow wastewater containing coolant from parts washing areas to drain into triple interceptor traps. These units are equipped only to separate oil from water and will not remove heavy metals and other chemical compounds from water.

Auto recyclers guideline

5.3 Fuel

Fuel that is collected from vehicles can be reused on site. However, gasoline can oxidise ('go off') after some time making it unusable and should be treated as liquid waste and managed accordingly.



Figure 7: Collecting fuel from the end of life vehicles

5.4 Liquid petroleum gas (LPG) cylinders

LPG gas cylinders are generally manufactured using plate steel and depending on the condition of the bottle, it can either be reused or recycled as scrap metal. LPG is stored inside tanks under high pressure. Therefore, cylinders must be free of all gas and liquid before they are shredded.



Important information

Drain the gas cylinders of their gas and liquid content before they are accepted by scrap metal shredders.



Figure 8: Pierce gas cylinders as an indication to the scrap metal collector that they are empty of content.

5.4.1 Potential hazards

- Due to the high-pressure nature of the gas cylinders and the flammability of LPG discarded gas cylinders may leak and catch fire if there is an ignition/spark, explode or propel at high speed if punctured.
- LPG can leak and mix with other potentially dangerous chemicals.

5.4.2 Storage

- Until the gas cylinders are rendered safe by a trained professional, treat gas containers as full. Store such containers in:
 - A secure, outside area that is well ventilated.
 - Away from other hazardous material such as waste oil or equipment that may pose a risk of explosion or fire.
- Degas gas cylinders by a suitable contractor or a person trained in the safe disposal method of gas cylinders.
- Once rendered safe, puncture and tag the cylinders to indicate they are gas-free.
- The 'gas-free' cylinders can be stored in a separate area until collected/ sent for scrap metal recovery.
- Use appropriate equipment (e.g. forklift) and adhere to occupational health and safety requirements when handling gas cylinders.



Important information

Gas cylinders should never be placed in landfill as they may explode or leak gas.

5.5 Fuel tanks

Drain fuel and LPG tanks completely before they are recycled. If they are getting scrapped, puncture the tanks safely before they are sent over to the scrap metal dealer to remove any vapour build-up. Puncturing will also provide visual verification to the scrap metal shredder that the contents of the fuel tank have been emptied. Do not fill tanks with wastewater.



5.6 Tyres

Tyres unfit to be used on a vehicle are classified as 'waste tyres' and such tyres should be recycled.



5.6.1 Potential hazards

- Tyres can cause significant fire hazards, breeding sites for vermin and assist in the spread of diseases.
- Leachate from tyres that have broken down can contaminate soil and groundwater.

5.6.2 Storage

- If you store over 40 tonnes/5000 equivalent passenger units (EPU) on your site, you need to obtain an approval from EPA.
- Please note that different tyre sizes equate to different EPU and therefore, this needs to be taken into consideration.
- When storing tyres onsite, ensure that they are stacked in a manner to prevent vermin from breeding in them and reduce the risk of fire.



Further information

Please visit the [EPA website](#) for more information on storage of waste tyres in Victoria.

5.6.3 Disposal

- Tyres should never be burnt to dispose of them.
- If tyres at your site are not suitable for reuse or recycling, you can hire a specialist contractor (accredited through [Tyre Stewardship Australia](#)) to remove them from your site.
- If tyres are shredded into pieces less than 250 mm, they may be accepted by a landfill licenced to receive them.

5.7 Batteries (lead-acid and electric vehicle)

Both lead-acid and electric vehicle batteries can be found in ELVs. Electric vehicle batteries are of a very high voltage and can cause electrocution if not handled according to manufacturer's guidelines. Staff that are handling these batteries may require additional training to prevent serious accidents when recycling. All types of batteries can be recycled and doing so will conserve valuable metals and reduce environmental impacts to landfill.



5.7.1 Potential hazards

- Batteries contain various chemicals and heavy metals such as lead, cadmium, lead sulphate, lead dioxide and sulphuric acid that are toxic to human health and can cause ecological impacts if they exceed a certain concentration in the environment.
- Batteries are a potential fire hazard.
- Pallet strapping of batteries using steel bands should be avoided to reduce the risk of fire.

5.7.2 Storage

- Store batteries under cool dry conditions in a roofed, bunded, well-ventilated area with an impervious surface.
- Metal objects should not be placed on top of batteries.
- Store away from flammable material and equipment that can create sparks.
- Clean up any spills from the batteries immediately.

5.7.3 Transport and disposal

Batteries should not be disposed into landfills. Heavy metals inside the batteries can leach out into the environment over time.

Make sure that you have packaged the batteries securely to protect against damage and spills before handing over to the waste transporter.



**Further
information**

More information on recycling batteries can be accessed through [Australian Battery Recycling Initiative website](#).

5.8 Air conditioning refrigerant

All types of vehicle refrigerants require analysis and recovery and must not be discharged into the atmosphere under *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (The Ozone Management Act 1989).



Figure 9: Refrigerant gas analyser (left) and gas recovery equipment (centre and right)

5.8.1 Potential hazards

- Discharge of gases that are hydrofluorocarbons (HFC), hydrochlorofluorocarbons (HCFC) and Chlorofluorocarbons (CFC) is illegal according to Section 45B (1) of *The Ozone Management Act 1989* and can damage the ozone layer and impact the climate.
- Unexpected discharge of gases can cause injury.
- Operators handling gasses that are HFC, HCFC and CFC are required to be appropriately licensed with the Australian Refrigeration Council (ARC).

5.8.2 Storage

- Analysis equipment should be used to identify gases in each ELV.
- If the analysis indicates that the gases in the container are the same as specified on the container recovery equipment must be used to collect the gases (HFC, HCFC and CFC) from ELV.
- If analysis indicates the ELV contains highly volatile gases (such as propane) then such containers must be handled with specially trained technicians and not collected by the refrigerant recovery equipment.
- Gases must be stored in appropriately labelled bottles.
- Records of equipment, maintenance and recovery of HFC, HCFC and CFC gases are required to be kept and are required to be made available during ARC permit condition checks (if relevant to the permit held).

5.8.3 Transport and disposal

- Gases must be transported by appropriate contractors.



Further information

More information on recycling air conditioning refrigerant can be accessed through the ARC website <https://www.arctick.org/>

5.9 Scrap metal

Scrap metal stockpiles include all types of unprocessed metal materials (excluding unprocessed and processed car bodies).



5.9.1 Potential hazards

- Leaching of fuel, oil and other contaminants into groundwater and soil from vehicle parts that have not been thoroughly drained.
- Release of particulate matter to air from cutting and shredding activities.
- Release of ozone-depleting substances into air.
- Potential fire hazard due to the presence of combustible contaminants.
- Unprocessed materials containing hazards such as exposed rust can increase the risk of combustion as oxidation of metals create heat.

5.9.2 Storage

Metal with combustible contaminants is considered a combustible waste, therefore chapter 5 – Effective storage management – in [Management and storage of combustible recyclable and waste material – guideline](#) (EPA publication 1667) is applicable.

5.9.3 Transport and disposal

Contact a company that handles scrap metal to pick up and dispose of/recycle the materials appropriately.

5.10 Bumpers and other plastics

Bumpers and other plastics collected from vehicles can be recycled where possible but should be appropriately stored until they are transported to a recycling facility. Bumpers and plastics are susceptible to fire risk.



5.10.1 Storage

- Bumpers and other plastics are highly flammable and are a combustible waste. Therefore, chapter 5 – Effective storage management – in [Management and storage of combustible recyclable and waste materials – guideline](#) (EPA publication 1667) is applicable.

5.11 Trade wastewater

Trade wastewater is stormwater that has been contaminated by oils and other grease residues. Trade wastewater cannot be discharged to stormwater drains. To reduce the volume of trade wastewater generated at your worksite, consider a stormwater diversion system around your site to reduce the risk of contamination. If you have a high risk of oil and grease residue on your site, your runoff will need to go through a triple interceptor before it can be discharged offsite into a sewer.



Important information

Do not discard trade wastewater into stormwater drains.

Trade wastewater generated on your site is considered a priority waste and can be managed through:

- A trade wastewater agreement with your local water authority.
- An appropriately permitted transporter who will remove solids, oil and/or water from your site and dispose of it appropriately.

You can enter into a trade wastewater agreement with your local water authority, that will allow you to discharge the wastewater that has gone through a triple interceptor system, into the sewer. Contact your local water authority for more information.

Alternatively, you can collect the wastewater onsite and employ an appropriately permitted transporter to remove the water and dispose of properly. The residue from the triple interceptors is categorised as priority waste and should be disposed of accordingly. If you use the services of a waste contractor, ensure you maintain records of all transactions, including invoices.

5.11.1 Triple interceptors and oil/water separator units

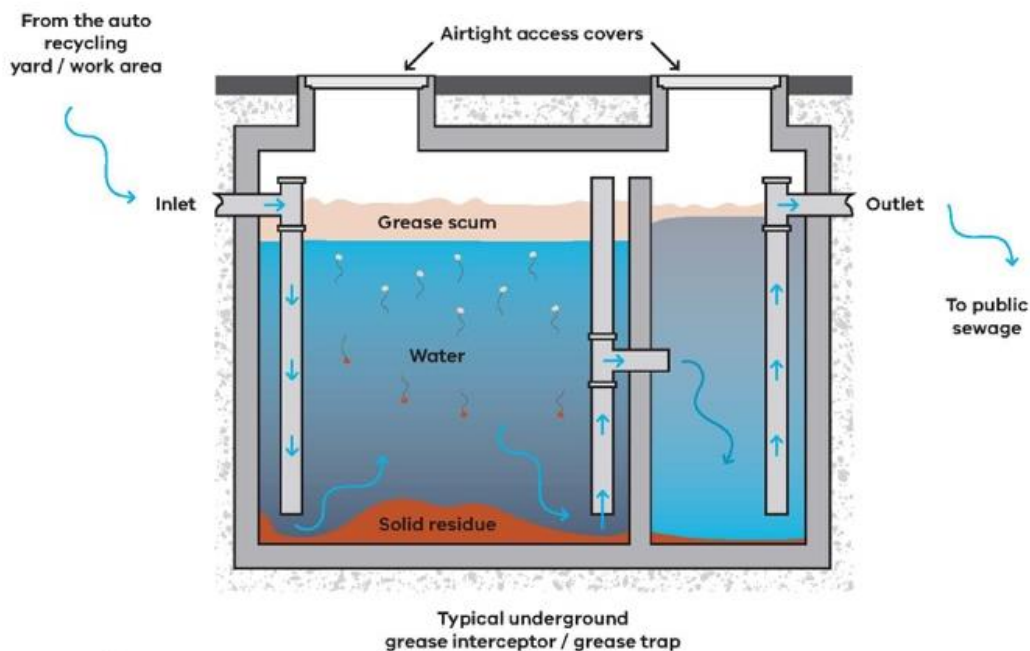


Figure 10: Typical underground grease interceptor/ grease trap

Triple interceptors and oil/water separators are devices that can be used to filter off any oils and hydrocarbons such as fuel and solids from water. Triple interceptors work on the theory that oils and other hydrocarbons float on water, while solids would sink to the bottom.

- Clean and maintain these devices regularly to ensure that they perform well.
- Maintain documentation that details the procedures to follow when cleaning and maintaining the devices.
- Implement a maintenance and cleaning schedule and assign staff for the duties.

5.11.2 What is appropriate disposal of waste?

It is a requirement to ensure that your waste is taken to a place that is lawfully authorised to receive it. Waste should be collected by an appropriately permitted transporter and taken to a lawful place (i.e. a location authorised to receive that waste).

The generator/owner, transporter and receiver of the waste have obligations under legislation and significant penalties apply if there is an offence.

5.11.3 How do you know which wastes should go where?

EPA provides information on determining how you can dispose of each type of waste. Please visit the [waste section](#) on the EPA website for more information.

If you are unsure you can contact:

EPA Victoria
Your local council
Waste disposal facilities
Waste disposal contractors

It is advisable to keep all your waste collection and disposal receipts to show where your wastes have gone.

6 Other things to consider

6.1 Noise

Auto recycling yards can generate excessive noise due to the nature of their operations. It is the responsibility of the operator to take steps to monitor and control the noise levels created by their business. Install systems and processes to ensure the well-being of staff and the community occupying properties in the vicinity. A good indication of excessive noise levels in a work area is if the noise level in that area disrupts carrying out a normal conversation.

Where necessary, employ the services of a suitably qualified acoustic consultant to assess the noise levels in such areas and take steps to mitigate the risk to human health and the environment from excessive noise.



Figure 11: Wearing ear plugs in high-noise areas will minimise damage to your hearing

Examples of how you can reduce the impact of noise:

- Installing or replacing old and/or noisy equipment with quieter equipment.
- Maintain equipment by replacing or adjusting loose or worn parts, lubricating moving parts or modifying components to remove clatter.
- Reducing the number of noisy machines running at any one time.
- Avoid running noisy machines at night. This will help reduce disturbance caused to neighbours.
- Avoid using noisy equipment such as air chisels and air operated de-scalers where possible.
- Silence air-operated equipment such as impact wrenches.
- Using vibration absorbers and dampers.
- Isolating vibrating machines from noise-radiating structures.
- Locating entrance and exit points away from noise-sensitive areas e.g. residential houses and parks.
- Modifying activities to minimise the amount or duration of vehicles reversing that is required to perform a task, while not compromising safety.
- Advise staff to wear ear protection (earplugs, earmuffs) as necessary and display warning signs in noisy areas.
- Ensure that staff frequently exposed to loud noises have their hearing checked every two years.
- Engage a reputable, appropriately qualified, experienced, competent acoustic engineer or consultant for further help.

See the [EPA webpage on noise](#) for more information.

6.2 Air

Auto recycling yards deal with volatile liquids such as fuel that can vaporise and can impact air quality and generate odour (see below). Also, dust from unpaved areas can be a cause of air pollution. It is important to know which of the substances that you drain from vehicles, store or use in the premises could volatilise or have a volatile component. The volatile nature of some compounds can sometimes also depend on weather conditions. Some volatile liquids such as fuel will generate an odour which will help you detect a leak through vaporisation. However, there could still be other substances that are odourless. Inhaling toxic fumes could be dangerous for your staff, other residents living around your site and the environment in general.



Some of the steps that you can take to reduce or eliminate the threats to air from your site are:

1. Keep an inventory of volatile substances including (fuel, solvents etc.) stored or used on site.
2. Refer to the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) to ensure that they are handled appropriately.
3. Assess the processes that use highly volatile substances to explore the possibility of replacing with a less volatile substance.
4. Install a solvent recovery unit. Spent solvents should never be burnt or allowed to evaporate as a means of disposal. They should be recovered and collected by an appropriately permitted individual or recycled onsite.
5. Ensure that containers used to store volatile liquids are tightly sealed and kept in a well-ventilated storage area.

6.3 Odour

Due to the presence of volatile components, odour can also be a potential risk posed to human health and environment through auto recycling sites. Following the steps stated in the [Air](#) section (above, on page 40) will help mitigate this risk.



Further information

Please also visit the [EPA webpage on odour](#) for more information on managing the production of offensive odours generated by business operations.

7 Emergency management

Emergency management is how you would handle the impact on your business by an unforeseen incident. These changes can be either natural such as a flood, cyclone or a bushfire or unnatural such as arson, riots, a bridge collapse or workplace incidents such as liquid spills and leaks.

Having a robust emergency action plan in place will ensure that your business will be able to overcome such crises with minimum impact.

A good emergency management plan will allow you to prepare for possible risks, plan actions to take during the emergency and afterwards as part of recovery.

Documenting and implementing an emergency management plan, and providing training to your staff in emergency management, can help you obtain insurance coverage for your business.

7.1 Developing an emergency management plan

Consider the following steps when developing an emergency management plan.

1. Research your business – identify the **critical business areas** (things that you cannot do without – staff, documents etc.), **impact to business if those areas fail** and **current protection strategies** that already exist to minimise the impact on your business.
2. List your emergency contacts:
 - Prepare a list of emergency services including local emergency, police, fire, ambulance and hospital.
 - It should also contain phone numbers of nominated people from your staff that the emergency services can contact when required.
 - You can also include a list of recovery services such as your bank, insurance company, suppliers, staff etc.
 - Keep a copy of the emergency contact list at a location (in an emergency box) close to the entrance to your site that is easily accessible by the emergency services and make your staff aware of its location.
 - You can also maintain a copy at a secure off-site location.
3. Review your evacuation procedures – an evacuation plan should already be in place at your worksite as part of the Occupational Health and Safety procedures. Review and update if necessary.
4. Create an emergency kit – your emergency kit should contain essential documents, list of emergency contacts, torch, first-aid kit, plastic bags, portable radio and spare batteries. Keep the emergency kit in an easily accessible location.
5. Set up an emergency action team and communicate – create an emergency action team within your workplace. Assign duties and responsibilities to these staff members and provide clear instructions and training as appropriate so that they are equipped to handle emergencies.
6. Rehearse your emergency management plan – an emergency management plan will have little use if the staff in your workplace are not aware of it. Therefore, communicate to your staff about the contents of the emergency management plan and rehearse it regularly.
7. Keep your emergency management plan up to date – situations at your worksite may change periodically. Update your emergency management plan to suit these changes. Regular rehearsals will also be a way for you to identify the gaps in your emergency management plan.



Further information

You can also access more information on emergency management plans through the [Australian government emergency management information for businesses](#).

Liquid spills and leaks are common incidents/ emergencies that can occur at auto recycling yards. Refer to [Liquid storage and handling guidelines](#) (EPA publication 1698) for more information on how to handle liquid spills and leaks.

8 Appendices

8.1 Additional guidance

Refer to the following websites for further reading and information.

- Victorian Automobile Chamber of Commerce (VACC): www.vacc.com.au
- WorkSafe: www.worksafe.vic.gov.au
- Australian Standards (AS): www.standards.org.au

Auto recyclers guideline

8.1.1 Example of a daily checklist template

Please note: this template is a guide only. You can modify it to suit your needs.

| | Risk | Action |
|--------------------------|---|--|
| <input type="checkbox"/> | Occurrence of workplace injuries due to slips, trips and falls | Ensure that all accessways, aisles and passageways are clean and clear of clutter |
| <input type="checkbox"/> | Attracting pests (rats, birds and other animals) to the worksite Occurrence of workplace injuries due to slips, trips and falls Loss of workplace amenity for work staff | Ensure that the work areas are clean and well organised |
| <input type="checkbox"/> | Occurrence of workplace injuries due to slips, trips and falls | Check all floor areas for spills and drips and clean up if present Report any leaks from waste oil storage containers etc. |
| <input type="checkbox"/> | Attracting pests (rats, birds and other animals) to the worksite Loss of workplace amenity for work staff Increased likelihood of fire on-site Increased risk of offsite impacts such as litter, odour, surface water, soil and ground water contamination | Check that the waste storage area is not full or close to becoming full and that wastes have been stored appropriately |
| <input type="checkbox"/> | Increased risk of fire on-site | Ensure any site protection equipment (e.g.: fire extinguishers) are not obstructed |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |

Carried out by:

Comments:

Signature:

Date:

Auto recyclers guideline

8.1.2 Example of a weekly checklist template

Please note: this template is a guide only. You can modify it to suit your needs.

| | Risk | Action |
|--------------------------|--|--|
| <input type="checkbox"/> | Identified risks of harm to human health and environment | Daily checklists are completed for each day. |
| <input type="checkbox"/> | Inability to contain any liquid spills of leaks | Check that all spill clean-up kits have enough material and are complete. Rectify if not complete. |
| <input type="checkbox"/> | Increased risk of fire on-site | All hazardous substances and dangerous goods are kept in properly identified containers. |
| <input type="checkbox"/> | Contamination of surface water, soil and ground water due to leaks Harm to human health | Visually inspect all storage tanks and containers for leaks or visible signs of weaknesses. |
| <input type="checkbox"/> | Increased risk to human health and environment due to lack of proper notices and signage | Check that all signage on site is intact, and appropriate to the risks. |
| <input type="checkbox"/> | Contamination of surface water, soil and ground water due to leaks Harm to human health through workplace accidents | Visually inspect the equipment for wear and tear. Report if parts need to be replaced. |
| <input type="checkbox"/> | Inability to control fire | Inspect the firefighting equipment for any leaks and to ensure that they are stored in designated locations. |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |

Carried out by:

Comments:

Signature:

Date:

8.1.3 Example of a staff training schedule template

Please note: this template is a guide only. You can modify it to suit your needs.

| Date | Training Module | Attendees | Attendee Signatures | Comments/Issues |
|------|-----------------|-----------|---------------------|-----------------|
| | | | | |
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Recognition statement

EPA acknowledges Victoria's First Nations peoples and their ongoing strength in practising the world's oldest living culture. We acknowledge the Traditional Owners of the land and water on which we live and work and pay our respect to their Elders past and present.

We acknowledge that:

- Land and water is of spiritual, cultural and economic importance to Aboriginal people.
- All places in Victoria exist on the traditional country of Aboriginal Victorians.
- Aboriginal interests, needs and aspirations are integral to EPA's core business.

In recognising and respecting thousands of years of environmental stewardship, Victorian Aboriginal peoples' and their culture is integral to EPA's regulatory remit to protect human health and environment from the harmful effects of pollution and waste. As part of our regulatory approach we seek to engage and work collaboratively to build a culturally safe and inclusive work environment that is inclusive of Aboriginal perspectives and values.

EPA encourages all Victorians to consider the ways in which they too can acknowledge, respect and protect Aboriginal cultural heritage.