

Australian Capital Territory

Environment Protection (Automotive Trades) Code of Practice 2019

Disallowable instrument DI2019-267

made under the

Environment Protection Act 1997, s 31 (Accrediting codes of practice)

1 Name of instrument

This instrument is the *Environment Protection (Automotive Trades) Code of Practice 2019*.

2 Commencement

This instrument commences on the day after its notification day.

3 Code of practice

I accredit the code of practice in schedule 1.

Mick Gentleman MLA
Minister for the Environment and Heritage
10 December 2019

Schedule 1 Automotive trades code of practice
(see s 3)

ENVIRONMENT PROTECTION (AUTOMOTIVE TRADES) CODE OF PRACTICE

Environment, Planning and Sustainable Development Directorate

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INTRODUCTION

Purpose

The purpose of this Environmental Code of Practice (the Code) for the automotive industry is to provide specific industry information which will assist the operators (including mobile services) and their employees to comply with the Environment Protection Act 1997 (the Act). It will also help to improve industry standards and progress towards best management practice.

There are a number of environmental risks associated with motor vehicle workshops. These include, but are not limited to:

- the release of harmful airborne contaminants and odours from fuel, dust, paint, solvents and other chemicals that may cause harm to people's health and wellbeing
- contaminated runoff entering waterways and land
- noise causing a nuisance to nearby sensitive places
- waste that may become litter or contaminate the environment.

ACT Legislation

The Act is administered and enforced by the Environment Protection Authority (EPA) in the Australian Capital Territory (ACT).

Provisions of the Act relevant to the automotive industry include:

- A general environmental duty which requires everyone to take practical and reasonable steps to prevent or minimise environmental harm or nuisance caused or likely to be caused by an activity.
- Accreditation for codes of practice for particular activities for which compliance should be taken as compliance with general environmental duty.
- The requirement for an audit or an environment improvement plan for an activity that may be causing environmental harm or contravening the Act.

Offences under the Act are related to causing environmental harm either knowingly or negligently with the level of the penalty aligned with the degree of environmental harm caused.

Minor environmental offences are addressed with fines. These include excessive noise, causing automotive fuel, oil, grease, degreasers, detergents and other hazardous wastes to enter the stormwater system or placing them in a manner which allows them to be washed into the stormwater system. Serious environmental offences may result in larger fines and prosecution.

Using the code of practice

The control measures outlined in this code are the minimum requirements to protect the environment.

The code of practice:

- gives practical guidance on how best management practice can be achieved in the motor vehicle workshop sector
- should be followed unless there is an alternative course of action that achieves the same or a better environmental outcome
- can help businesses demonstrate that they have taken reasonable care to avoid causing environmental harm and in meeting their general environmental duty.

Environmental Management Plan

Best management practice would include businesses developing an Environmental Management Plan (EMP), which identifies environmental risks caused by an activity and puts control measures in place to manage these risks before they result in environmental harm.

The performance outcomes and control measures listed in this document will form a solid basis for creating an EMP. A useful reference that may assist in preparing an EMP is the ACT Environmental Guidelines for Preparation of an Environment Management Plan, which is available by visiting www.act.gov.au/accesscbr or by contacting the EPA by calling 13 22 81.

Performance Outcomes and control measures

Performance outcomes are the end result that the business needs to achieve to meet the ‘**general environmental duty**’ described under the Act.

There are **four performance outcomes** in this code of practice:

1. **Releases to land or water:** there is no discharge to land or water of contaminants that may harm the environment or create a nuisance from the operation of the activity.
2. **Releases to air:** there is no discharge to air of contaminants that may harm the environment or create a nuisance from the operation of the activity.
3. **Waste:** waste production and disposal should be minimised and waste managed so it does not harm the environment or create a nuisance from the operation of the activity.
4. **Noise:** environmental harm or nuisance from noise is prevented or minimised.

Control measures

Control measures are suggested examples to help achieve the performance outcome. You should aim for the control measure or combination of control measures that is most likely to achieve the required performance outcome.

Alternatively, you may be able to meet a performance outcome in a manner that is not listed in this code of practice.

Performance outcome 1: Releases to land and water

There is no discharge to land or water of contaminants that may harm the environment or create a nuisance.

The stormwater, groundwater and land must be protected from contamination.

Control measures

General

- ✓ Ensure all drains inside a workshop area are not connected to the stormwater system.
- ✓ Ensure there is a physical barrier such as a cut-off drain or a bund at the entry or exit to a workshop or wash down area to contain waste where there is a likelihood of spills or runoff from wash down.
- ✓ Keep a **spill kit** on site to contain or absorb any accidental spills. For small workshops a spill kit bag may be adequate. Larger workshops will require a specifically designed spill kit.
- ✓ All vehicle washing should be performed in a designated wash down area. Waste water from this area which is not recycled should be directed to sewer with the utility service provider (Icon Water) approval.

Storage

- ✓ Chemicals and other liquids should be stored and used undercover and secured against unauthorised entry and appropriately secured when unattended.
- ✓ Keep chemicals and other liquids including wastes (such as fuels, solvents, oils, batteries, lubricants, degreasers, detergents, coolants, brake and transmission fluids, and wash liquids) within a **secondary containment system** that is impervious to the materials stored within it. Secondary containment systems may be fixed bunding, self-bunding pallets or double skinned containers.
- ✓ Bunds need to be sized to hold the contents of the largest container stored inside the bund, plus 10% of its volume.
- ✓ All above ground fuel storage over 200 litres should have a physical barrier, such as bunding, to contain all spills. The area should have a capacity of 110% of the largest tank's storage capacity. Fuel storage tanks are subject to the provisions of the Dangerous Substances Act 2004 and guidance issued by the EPA. For further information contact 13 22 81.

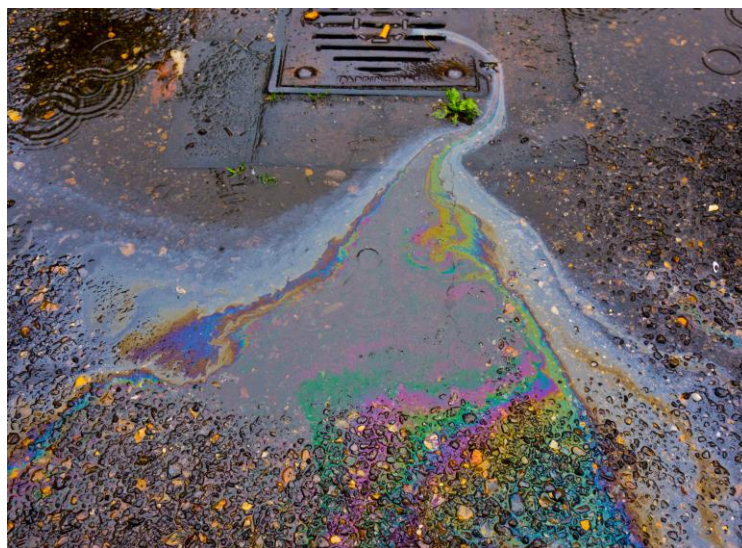


Image 1 Pollution entering a stormwater drain.

Waste disposal

- ✓ Any liquids collected in the bunded areas should be treated in an oil/water separator or collected for disposal by a licensed waste contractor.
- ✓ When applicable ensure that drip trays are used under vehicles to catch spent oil, solvents or detergents.
- ✓ Used fuel or oil filters must be drained before disposal.
- ✓ The electrolyte from used or damaged batteries must be drained and stored under a covered area in appropriate containers on drip trays and recycled or disposed of through a licensed waste contractor.
- ✓ Used solvents should be recycled or disposed of through a licensed waste contractor.
- ✓ Sludge from acid and alkaline baths should be collected by a licensed waste contractor. Sludge must not be disposed of to landfill.
- ✓ Dust from the brake linings must be vacuumed and collected rather than blown off, and disposed of appropriately.
- ✓ Used fluid must be disposed of through a licensed waste contractor or recycled.
- ✓ Coolant drained from a vehicle must be contained and disposed of through a licensed waste contractor.

Monitoring and maintenance

- ✓ Regularly monitor any underground storage, containers and transfer equipment to detect leakage.
- ✓ Bunds need to be maintained and regularly checked.

Washing and cleaning

- ✓ Washing and cleaning of vehicles, parts and equipment must take place in specified area (i.e. wash bay)
- ✓ Cleaning activities should be carried out in a designated area where the waste water from that area is directed to sewer only with the utility service provider (Icon Water) approval or a waste water collection system.
- ✓ Under no circumstances should workshops and outdoor areas that drain to the stormwater system be hosed down as a means of cleaning.

Divert stormwater

- ✓ Clean stormwater should be diverted away from areas that could potentially be contaminated.

Releases to land and water can be caused by inappropriate storage or use of:	Potential risks and impacts
<ul style="list-style-type: none">• disinfectants• fuels• oils• detergents• poisons• cleaning solvents• thinners• alkaline or acidic solutions• coolants	Contaminants can enter the land, waterways or stormwater drains and this pollution can negatively impact our environment by altering the ecosystem of waterways and resulting killing fish and other aquatic species and cause soil contamination.

Performance outcome 2: Releases to air

There is no discharge to air of contaminants that may harm the environment or create a nuisance from the operation of the activity.

Control measures

General

- ✓ All panel beating work is conducted inside the workshop or in an undercover area.
- ✓ Conduct spray painting in a spray booth constructed and maintained in accordance with the relevant Australian Standards. Spray painting is not permitted in the open. Minor operations of spotting and touching-ups (such as painting small scratches, chips and dents) are exempt.
- ✓ Mix paints in a room with a filtered exhaust.
- ✓ Direct exhaust fumes away from neighbouring properties.
- ✓ Carry out wet and dry sanding in an enclosed area where dust and residues can be contained.
- ✓ Ensure sanders have dust vacuums.
- ✓ In order to minimise emissions of hydrocarbons into the air the operators of fuel storage facilities must comply with the EPA petroleum storage guidance.
- ✓ Dust from the brake linings must be vacuumed and collected rather than blown off, and disposed of appropriately.
- ✓ If decommissioning air conditioning systems, an ARCtick licence must be held by the business and relevant technicians.

Storage

- ✓ Ensure volatile liquids such as solvents are stored in containers with lids and taps for dispensing.

Monitoring/Maintenance

- ✓ Ensure spray booth filters are regularly maintained.
- ✓ Control dust by setting up an effective dust extraction and filtration system at locations where dust is generated.

Washing and Cleaning

- ✓ Regularly clean workshop floors to keep dust levels to a minimum and do not clean the floor by blowing with compressed air.

Releases to air can be caused by the inappropriate storage and use of:	Potential risks and impacts
<ul style="list-style-type: none">• paints• powder coatings• surface preparation products• paint stripper• finishers• solvents• thinners• compressed air	Dust, offensive odours and toxic vapours from spray painting and surface preparation can affect the environment and human health and enter neighbouring properties causing nuisance.

Performance outcome 3: Waste

Waste production and disposal should be minimised and waste managed so it does not harm the environment or create a nuisance from the operation of the activity.

Control measures

Reuse and recycling

- ✓ Reusing, recycling and waste minimisation should be considered before disposal of wastes. The ACT Government provides a service called Actsmart to help businesses put efficient recycling and waste management into action. See www.actsmart.act.gov.au for more information.
- ✓ Segregate recyclable wastes for collection by licensed waste contractors or dispose to a licensed facility.
- ✓ The following wastes should be collected in separate bins for either reuse or recycling through licensed waste recyclers and their agents or transported by a licensed waste contractor for disposal or dispose to a licensed facility:

Solid wastes

- Cardboard packaging and paper
- Metal parts (steel and aluminium)
- Plastic containers
- Batteries
- Tyres
- Radiator cores and parts
- Brake and clutch parts
- Steel drums, drained steel cans
- Aluminium cans and glass bottles

Liquid Wastes

- Waste oil and brake fluid
- Coolant
- Solvents/thinners
- Paints

Storage

- ✓ Wastes (including for recycling) should be stored under cover or in bins or containers which are lidded or sealed in a way that prevents the waste washing or blowing away.
- ✓ Clearly label waste containers for segregated wastes and locate them in easy access areas to encourage use.
- ✓ Undertake regular housekeeping to ensure wastes are placed in their appropriate place and removed when required.

Disposal

- ✓ Retain documentation relating to the removal and disposal of all types of waste.
- ✓ Reclaimed refrigerants should be removed for appropriate disposal by a licenced waste contractor.
- ✓ Place only dry solid wastes in your industrial waste bin. Do not put liquid or hazardous waste in your general waste bin.
- ✓ Waste is not to be disposed of by burning.
- ✓ Ensure **regulated wastes** that are not being recycled or reused are separated and removed for disposal by a licensed waste contractor

Trade Waste - The Sewerage System

Contaminated water from industry, referred to as trade waste water, can generally be discharged to the sewerage system only with the utility service provider (Icon Water) approval. Trade waste water is not necessarily toxic however it is generally harmful to the environment if it is discharged directly into the stormwater system. Icon Water manages the sewerage system so that waste water (sewage) can be treated prior to discharge to the environment.

Type of waste		Potential risks and impacts
Regulated waste	<ul style="list-style-type: none"> oily rags oil filters waste oils solvents coolant caustic brake fluid fuel batteries tyres asbestos workshop sweepings spill products spent abrasive material containers and rags contaminated with chemicals such as oil and paint 	<ul style="list-style-type: none"> Waste, when not properly managed, can cause littering and contamination of land and water. Sending waste to landfill has significant environmental impacts from transporting the waste for disposal, to potential leachate, odour and greenhouse gas emission impacts. Producing waste has impacts from extracting resources through to disposal in landfill
General waste	<ul style="list-style-type: none"> radiator cores and parts cardboard packaging brake and clutch parts steel drums steel and aluminium cans glass scrap metal plastics 	<ul style="list-style-type: none"> Waste, when not properly managed, can cause littering and contamination of land and water. Sending waste to landfill has significant environmental impacts from transporting the waste for disposal, to potential leachate, odour and greenhouse gas emission impacts. Producing waste has impacts from extracting resources through to disposal in landfill

Performance outcome 4: Noise

Environmental harm or nuisance from noise is prevented or minimised.

Control measures

- ✓ Limit work hours to prevent audible noise at noise sensitive places in the evening, night and early morning.
- ✓ Locate equipment that generates high levels of noise away from noise sensitive land uses.
- ✓ Operate equipment and machinery in accordance with manufacturer's requirements.
- ✓ Fit noise reduction mechanisms to equipment and machinery where possible.
- ✓ Reduce the amount of noise and vibrations from mechanical equipment by:
 - ✓ mounting on individual foundations/mounts designed to isolate structure-borne vibration and noise
 - ✓ mounting on rubber mats
 - ✓ Increasing mass weight of equipment.
- ✓ Fit mechanical ventilation systems with noise-proof ducting and acoustically designed intake and exhaust openings.
- ✓ Provide noise barriers such as acoustic screens (fixed or mobile) around activities that may create environmental harm or nuisance. Vegetation screens can also assist with noise reduction.
- ✓ You must meet the relevant noise zone standards for your area:

Location	7 am to 10 pm (8 am to 10 pm Sunday and public holidays)	10 pm to 7 am (10 pm to 8 am Sunday and public holidays)
Industrial Areas (Fyshwick/Hume/Mitchell)	65 dB(A)	55 dB(A)
Civic centre and other major town centres (Belconnen, Gungahlin, Woden and Tuggeranong)	60 dB(A)	50 dB(A)
Group centres such as Dickson and Kingston	55 dB(A)	45 dB(A)
Smaller local centres such as Griffith and Lyneham	50 dB(A)	35 dB(A)
Residential areas	45 dB(A)	35 dB(A)

Major noise sources at motor vehicle workshops include:	Potential risks and impacts
<ul style="list-style-type: none">• pneumatic tools• engine testing equipment• compressors• grinders• drills• public address systems	Noise pollution from noisy equipment, public address systems and engine testing may affect adjacent residential areas or nearby businesses.

APPENDICES

Appendix A – Processes generating pollutants

These are some of the common processes carried out in the automotive industry which generate pollutants.

- ✓ **Forecourt and Workshop Floor Washing**
- ✓ **Mechanical Repairs and Servicing**
 - Automobile Dismantling
 - Parts washing with water
 - Parts washing with solvents
 - Floor wash down
 - Cleaning of engine blocks and engine heads in chemical baths
 - Draining of radiator coolant
 - Draining of batteries
 - Draining of engine oils
- ✓ **Repairing Car Bodies**
 - Wet rubbing
 - Spray painting
 - Dry sanding
- ✓ **Vehicle Washing and Detailing**
 - Tunnel type
 - Wand type
 - Washing by hand
 - Degreasing of engine and underbody
- ✓ **Other**
 - Abrasive blasting
 - Electroplating

Appendix B – Motor vehicle industry pollutants

The motor vehicle servicing industry generates various pollutants that are harmful to the environment and could also cause damage to the stormwater or sewage system. To control these pollutants it is necessary to understand how they may be generated and what may occur when they enter the environment or stormwater or sewerage systems. The following is a list of pollutants commonly discharged by the motor vehicle servicing industry.

Petroleum Hydrocarbons

Petroleum hydrocarbons are difficult to treat in sewage treatment plants. Petroleum hydrocarbons in waterways can create oil slicks and harm aquatic organisms. Some petroleum hydrocarbons are flammable and these are not permitted to be discharged in any circumstances. Sources of petroleum hydrocarbons are diesel, petrol, solvents, engine oil, grease and degreasers. Petroleum hydrocarbons could also contribute to site contamination (soil) and air pollution.

Metals

Lead, zinc, copper, iron, chromium, nickel and aluminium are the main type of metal pollutants from this industry. Metals can cause problems for both stormwater system and the sewage treatment processes. Sources are leaded petrol, radiators, engine parts, catalytic converters, batteries cleaning of engine blocks and metal finishing processes (such as electroplating). These metals can also contribute to soil contamination (soil).

Chlorinated Solvents

Chlorinated solvents are toxic in varying degrees to humans and sewage treatment. Chlorinated solvents may also damage plastic drainage fittings and can contribute to soil contamination and air pollution. Sources include decarbonising solutions and degreasers.

Volatile Organic Compounds (VOCs)

VOCs include hydrocarbon based solvents and unburnt liquid fuels. Some of these substances are known, or are suspected, to have a potential to cause adverse environmental and health effects. Examples of VOCs used by the industry are solvents, thinners, acrylic lacquers and fuels.

Acidity and Alkalinity

Acidic products and wastes such as battery acid and alkaline products and wastes such as caustic cleaners may have a detrimental effect on the environment. In particular, they can cause damage to the sewers and injure people working in the sewerage system. Battery acid can also cause the release of toxic hydrogen sulphide gas. In the stormwater system these products and wastes can degrade water quality for aquatic plants and animals and recreational activities.

Suspended solids

Small particles of solid matter in trade waste water are referred to as suspended solids. High levels of solid material like grit can form deposits in the bottom of sewers and reduce the available capacity of the flows and also can accumulate in wet wells and pumping stations causing blockages. This causes deterioration of mechanical equipment (pumps and valves) by abrasion. The main source for suspended solids in the motor vehicle industry are road grime and underbody and engine mud.

Ozone depleting substances

Ozone depleting substances (CFCs and HCFCs) are used in automotive air conditioning equipment. These substances, if released into the atmosphere, can cause damage to the ozone layer.

Acknowledgments

The ACT Government acknowledges the work of the Queensland Government in the development of this code of practice.



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