Environmentally Relevant Activities (ERAs)

Guidelines for motor vehicle workshops

(includes panel beating, spray painting, mobile operations and detailing)



Introduction

This training program is designed to assist motor vehicle workshops to fulfil their legal requirements and to implement environmentally healthy practices in the workplace.







This program aims to

- Provide workers with the necessary skills and knowledge to implement environmentally healthy practices in the workplace.
- Assist motor vehicle workshops to fulfil the conditions of their development permit (and Environmental Management Program if applicable).
- Promote awareness of environmental principles and values.
- Protect Queensland's environment in line with the Queensland Government's Environmental Protection Act 1994.





Program outline

- General matters
- Waste management
- Storage of potential contaminants
- Car detailing
- Air conditioning servicing
- Nuisances: noise, air, odour, light, visual amenity
- Conclusion





My general environmental duty

"I must not carry out any activity that causes, or is likely to cause environmental harm unless I take all reasonable and practicable measures to prevent or minimise the harm."





What is an environmentally relevant activity (ERA)?









An ERA is an activity in which

- A contaminant will or may be released into the environment when the activity is carried out; and
- The release of the contaminant will or may cause environmental harm.
- Note: From 31 March 2013 some licencing procedures are simpler and many businesses don't need to apply for an environmental approval from local government.
- This means that many businesses don't need to hold an environmental authority with Council; although they will still need to comply with the standards. In most cases Council officers are still responsible for investigating pollution incidents and environmental nuisance e.g. noise from a compressor or paint overspray.





Motor vehicle workshops

(includes panel beating, spray painting, mobile operations and detailing)

- Motor Vehicle Workshops are no longer required to hold an Environmental Authority as a
 "environmentally relevant activity" with their Local Government. You still have a responsibility
 to comply with the General Environmental Duty (Section 319), other relevant legislation, and
 other related applications (e.g. Development Approval) to ensure that your business does not
 have an adverse impact on the environment.
- The General environmental duty Code of practice for motor vehicle workshop operations, written by the Department of Environment Heritage Protection provides guidance on how to meet the General Environmental Duty.
- Complying with this Code provides a defence against a charge of unlawfully causing environmental harm and other charges.









Motor vehicle workshops

(includes panel beating, spray painting, mobile operations and detailing)

- Businesses that conduct any of the following activities requires an Environmental Authority from Council.
 - ERA 6 Asphalt Manufacturing
 - ERA 12 Plastic Product Manufacturing (50t or more of plastic products/yr; or 5t or more of foam, composite plastics or rigid fibre-reinforced plastics/yr)
 - ERA 19 Metal Forming (10000t or more/yr)
 - ERA 20 Metal Recovery (less than 100t/day; or more than 100t/day or 10000t/yr)
 - ERA 38 Surface Coating (anodising, electroplating, enamelling or galvanising using 1t to 100t of surface coating materials in a year)
 - ERA 49 Boat Maintenance or Repair
 - ERA 61 Waste Incineration and Thermal Treatment







Complaints register

Each workshop is required to document any environmental complaints, including:

- time, date and nature of complaint
- how the complaint was made
- details of the complainant
- investigation into the complaint and action taken
- details of the person who investigated the complaint
- response to complainant if applicable.





Incidents register

All environmental incidents occurring on the premises must be recorded in an Incidents Register which must record:

- time, date and details of the incident
- how the incident occurred
- action taken to remedy the incident
- investigation into the incident
- recommendations from investigation.







Environmental Health Officers (EHOs)

- The Queensland Government has entrusted Councils with the responsibility of administering and enforcing certain parts of the legislation.
- An EHO is a person authorised by the Council to conduct inspections of motor vehicle workshops to ensure compliance with legislation.

An EHO:

- assesses registration applications
- provides assistance for workshops to comply
- undertakes audits of registered premises
- investigates complaints
- enforces legislation if necessary.







The following slides...

- Provide an overview of the general requirements pertaining to motor vehicle workshops:
 - waste management
 - car detailing
 - air-conditioning servicing
 - nuisance issues (noise, air/odour, light, visual amenity)

Please refer to your development approval (and EMP if applicable) for the full requirements.







Waste management









Waste management

- Waste management is the most important environmental concern for motor vehicle workshops.
- It is the responsibility of each motor vehicle workshop to ensure that all waste products are disposed of in the appropriate manner.





Why is waste management important?

It is important for the health of:

- people
- ecosystems, and
- land (quality & useability).





Waste management hierarchy

This is the preferred order of waste management practices to achieve the best environmental outcome:

- Waste avoidance
 preventing the generation of waste or reducing the amount of waste generated
- Waste re-use re-using waste without first substantially changing its form
- Waste recycling treating unusable waste so it can be used to produce new products
- Energy recovery from waste recovering and using energy generated from waste
- 5) Waste disposal disposing of waste in a way that causes the least harm to the environment







Stormwater drains

Please note: anything which enters a stormwater drain will flow directly into your creeks, rivers & oceans.











Stormwater drains

- Virtually nothing from a motor vehicle workshop is safe to enter a stormwater drain.
- All work and storage areas must be covered and protected from stormwater to prevent stormwater contamination.





Stormwater drains

The following substances, common to motor vehicle workshops, are particularly bad for our waterways and must be excluded from stormwater drains:

- wastewater from washing, painting, mechanical repairs etc
- oil and grease
- glycol (engine coolant)
- metal particles
- all runoff from work areas





Wastewater

- should preferably be treated on-site and re-used
- must never be let into the stormwater system
- may only be released into the sewer system under a trade waste permit
- in the absence of a trade waste permit, it must be removed from the premises by a licensed waste transporter (records to be kept on site).





Regulated wastes

The following substances are hazardous to the environment and may only be disposed of via regulated methods:

- oil and grease, including oil interceptor sludges and oil/water emulsions
- paint, and paint residues in any form
- tyres (should be covered from rain, punctured or removed to prevent accumulation of stale water & consequent mosquito breeding)
- batteries
- inks & resins
- caustic solutions
- electroplating residues
- detergents
- asbestos
- washdown water from vehicles and industrial plants









Regulated waste removal

Regulated wastes must be removed from the premises by a licensed regulated waste transporter.

If the amount of waste is less than the threshold amount for that material, you can take it yourself to a regulated waste disposal facility.

The following must be recorded:

- date and time of removal
- how much material was removed
- destination of material
- licence number and details of removalist (if applicable)
- hazardous waste disposal facility receipt (if applicable).







Recycling

Wherever possible, waste should be processed and recycled, especially:

- wastewater
- process water (eg from wet rub down of vehicles)
- waste glycol (coolant)
- solvent
- scrap metal
- plastics
- rags.









General waste principles

- Waste is minimised when possible.
- Waste storage area is undercover and maintained in a clean and tidy condition.
- Waste containers are clearly labelled and located in conveniently accessible areas.
- Only solid, inert waste is disposed of to landfill.
- No incineration of wastes on-site.
- Floor cleaned using wet/dry vacuum, not hosing.









Storage of potential contaminants









Liquid product storage & Storage of dangerous goods

- The storage of dangerous goods is regulated by the Queensland Work Health and Safety (WHS) Act 2011
- dangerous goods means—
 - (a) asbestos; or
 - (b) anything defined under the ADG Code as—
 - (i) dangerous goods; or
 - (ii) goods too dangerous to be transported
- Dangerous goods include but are not limited to, combustibles such as fuels, flammable products such as aerosols and corrosive products for example cleaning items







Bunding

Bunding is the construction of a barrier around a stored substance for the purpose of containing a possible spill.

Bunding for waste oil storage, with **rain protection**





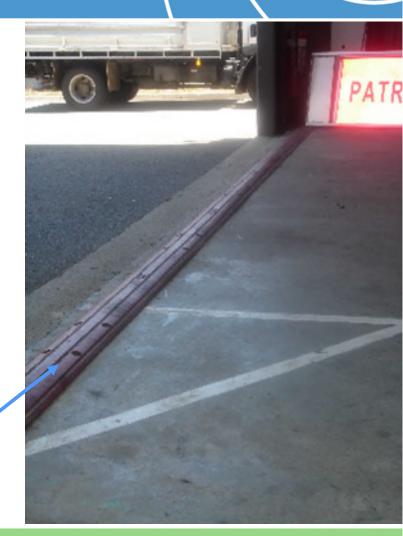




Bunding

Bunding is the construction of a barrier around a stored substance for the purpose of containing a possible spill.

Bunding for a workshop floor









Bunding and covering

- Potential solid and liquid contaminants must be stored within an adequately bunded area, and away from through traffic.
- The bund must be constructed of a compound which is impervious to the materials stored within.
- Potential contaminants must also be stored under adequate covering.
- The covering must protect stormwater from being contaminated in the event of a spill.





Spilling and clean-up

- Spill clean-up equipment must be clearly marked and readily available for all stored potential contaminants, eg:
 - oil
 - paints and solvents
 - glycol (engine coolant)
 - parts washer
 - used batteries
 - most liquid products.
- Procedures must be in place for containment and disposal of spilt contaminants.
- All containers with decanting taps must be fitted with spill trays to contain drips from taps.
- A spill is to be recorded in the Incidents Register.







Spilling and clean-up



Spill clean-up kit







Car detailing









Vehicle surface preparation

- In all vehicle surface preparation, ensure that no particles are released into the air of the surrounding environment (eg from sanding, grinding, dry rub).
- Preferably, dust collection equipment should be provided to all dry rub down equipment (fitted to equipment or downdraught floor with filtration).
- Particles must be collected and disposed of appropriately.
- Volatile solvents and paints must be stored within sealed drums or containers to prevent poisonous gases escaping into environment.





Spray painting

- All spray painting (other than spotting and touching up) must be conducted in an approved booth. (See Operator Compliance Guide.)
- Water scrubber booth requirements:
 - water scrubber booth has sprays functioning correctly
 - water float level is correct
 - manometer must be fitted to indicate negative pressure between the plates
 - addition of water and chemicals is as per manufacturer's specifications







Spray painting

- Filter requirements:
 - dry filter booth has filter fully-covering support frame spaces
 - dial gauge or manometer is fitted to indicate static pressure drop and replacement of filters
 - spare filters are kept at the premises
 - filter media/material is designed appropriately for usage in spray booth.







Airconditioner servicing









What is the significance of airconditioner servicing?

The servicing of car airconditioners represents a risk of damage to the environment in the form of ozone-depleting emissions.

The ozone gas (O₃), found high in the atmosphere, is Earth's natural UV barrier - Earth's "sunscreen".

Certain gases from human activity, like the CFC-12 used in many car airconditioners, absorb this ozone.

As ozone is depleted, the sun's UV rays become stronger on Earth.







Who can service car air-conditioners?

- Only a person who has completed the ozone awareness course through Queensland TAFE may service vehicle airconditioners.
- Proper procedures must be adhered to at all times to prevent the release of harmful gases into the atmosphere.





Nuisance issues









Nuisance issues

The following emissions have potential to cause nuisance to the occupants of neighbouring areas and need to be controlled appropriately:

- noise
- dust and particulate matter
- odours
- light.







Noise

- Queensland's nuisance laws include provisions against excessive noise.
- It is the responsibility of each motor vehicle workshop to ensure that noise is not causing nuisance to surrounding premises.
- Noise generating equipment and processes (eg compressors, engine tuning, power and air tools) must be operated within suitably enclosed space.









Air and odour

Dust, particulate matter and odours, emanating from a business premises, can cause significant nuisance to neighbours and even air pollution on a larger scale, or damage to human health.

Such emissions are required to be minimised and controlled appropriately.

The Department of Environment & Heritage Protection (DEHP, previously know as EPA) regulates the emission of certain substances beyond a threshold amount.







Lighting

The lighting of a business premises for security or any other reason is to be controlled so that annoyance is not caused to the occupants of neighbouring areas.









Visual amenity

Consideration should be given to the external image of a business.

The clean and tidy state of the outside should reflect the orderliness of the inside.

It is to the benefit of both businesses and the public that the business premises presents a pleasing image. The visual amenity should preferably blend suitably with the surrounding environment.









Outline of material covered

- General matters
- Waste management
- Storage of potential contaminants
- Car detailing
- Air conditioning servicing
- Nuisances: noise, air, odour, light, visual amenity
- Conclusion





Conclusion

- If motor vehicle workshops adhere to the guidelines presented in this training program, they will have done their part to protect Queensland's environment from degradation.
- Every person working in the industry has a responsibility to ensure environmentally healthy practices are implemented.
- Please refer to the conditions of your Development Permit (and EMP if applicable) for a full outline of required practices.





GOOD-BYE

