Australian Government

# AURAEA3003 Monitor environmental and sustainability best practice in the automotive mechanical industry

**Release 1**

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

# AURAEA3003 Monitor environmental and sustainability best practice in the automotive mechanical industry

## Modification History

| Release | Comment |
|---|---|
| **Release 1** | Replaces AURT271781A Implement and monitor environmental regulations in the automotive mechanical industry<br>Performance Criteria updated to reflect sustainability |

## Unit Descriptor

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| **Unit descriptor** | This unit describes the performance outcomes required to apply and monitor environmental regulations and sustainability best practice whilst undertaking mechanical service or repair of light or heavy vehicles, motorcycles, outdoor power equipment or their components in the automotive mechanical industry.<br>Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority. |

## Application of the Unit

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| **Application of the unit** | Work involves the theory, knowledge and application of skills related to environmental regulations and sustainability best practice in the automotive mechanical industry. |

## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.


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# Employability Skills Information

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| **Employability skills** | This unit contains employability skills. |

# Elements and Performance Criteria Pre-Content

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| Elements describe the essential outcomes of a unit of competency. | Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide. |


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# Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Apply and monitor environment regulations | 1.1. Reasons for ethical environmental practice in an automotive workplace are identified<br>1.2. Environmental responsibilities and penalties for individual breaches of legislation and regulations are identified<br>1.3. Documents and procedures relevant to environmental safety and hazards are applied<br>1.4. Safety equipment and other material necessary to support environmentally sound practices are identified and sourced |
| 2. Monitor and avoid contamination to water systems and land | 2.1. Wastewater and contaminants are identified and prevented from entering water systems or contaminating land<br>2.2. Surface cleaning, engine degreasing and preparation is undertaken in an impervious paved area and does not contaminate water systems or land<br>2.3. Parts and components containing hazardous materials are drained and stored in a sealed container<br>2.4. Liquid wastes are put into storage or recycling containers and placed in an undercover bunded area<br>2.5. Parts washing is undertaken in an approved parts washer that does not cause contamination of water systems or land<br>2.6. Spill kit is located and used to prevent water or land contamination<br>2.7. Drip trays are used under vehicles to minimise spills<br>2.8. Spills are cleaned immediately and workplace is kept clean to prevent unintentional water or land contamination<br>2.9. Hands are cleaned over drains connected to an oil/water separator or drums for collection of liquid waste |
| 3. Monitor and avoid hazards to air quality | 3.1. Vehicle exhausts and emissions are minimised and prevented from collection in the workplace<br>3.2. Welding is conducted in a well ventilated area<br>3.3. Hazardous airborne particles are monitored, prevented, reduced and contained<br>3.4. Hazardous gases and fumes are monitored, prevented, reduced and contained |
| 4. Monitor and avoid noise hazards | 4.1. Hazardous noise activities are monitored, prevented, reduced and contained<br>4.2. Hazardous noise activities are carried out within approved operating hours and regulations |
| 5. Monitor and apply sustainability best | 5.1. Sustainability best practice is monitored and applied to minimise waste and potential damage to the environment |


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| practice | according to workplace policies and procedures<br>5.2. Methods to reduce resource consumption (water, electricity, fossil fuels, chemicals) are monitored and applied<br>5.3. Environmental damage and breaches of environmental regulations are monitored and recorded |


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# Required Skills and Knowledge

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit.

**Required skills**

- communication skills to:
  - follow oral instructions
  - communicate ideas and information (verbal and written) as they relate to environmental regulations and sustainability best practice for an automotive mechanical workplace
- initiative and enterprise to identify sources of information, assistance and expert knowledge to expand knowledge, skills and understanding
- literacy skills to:
  - understand automotive mechanical workplace environmental procedures
  - read and apply environmental regulations for an automotive workplace
  - record environmental damage and breaches of environmental regulations
- numeracy skills to:
  - interpret instruments, gauges and other recording equipment
  - measure and calculate length, area and volume
- planning and organising skills to:
  - identify risk factors and actions to minimise risk
  - identify planning, checking and inspection techniques to avoid environmental contamination and wastage
- problem-solving skills to:
  - recognise a workplace problem or a potential problem
  - refer problems outside area of responsibility to appropriate person and suggest possible causes
  - identify processes which contribute to improvements for sustainability best practice
- self-management skills to:
  - identify appropriate safety and environmental response equipment, materials, processes and procedures
  - recognise limitations and seek timely advice
  - teamwork skills to work with others and in a team by cooperating with team members
- technical skills to:
  - collect, organise and interpret technical information related to recognising automotive mechanical workplace situations that are potentially harmful to the environment
  - use spill kits
- technology skills to use workplace environmental safety-related technology to assist with clean and safe work practices

**Required knowledge**


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## REQUIRED SKILLS AND KNOWLEDGE

- aspects of environmental regulations and its implications for work being undertaken in an automotive workplace
- characteristics and potential environmental impact of products, equipment and machinery used in the automotive workplace
- philosophy of prevention, reuse, reduce, recycle
- procedures for use of spill kit
- effects of pollution and methods to minimise it
- actions to be undertaken in case of significant environmental threat in the automotive mechanical workplace
- monitoring and recording procedures for environmental damage and breaches of environmental regulations


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# Evidence Guide

| **EVIDENCE GUIDE** | |
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| The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package. | |
| **Overview of assessment** | |
| **Critical aspects for assessment and evidence required to demonstrate competency in this unit** | The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria and required skills and knowledge.<br>A person who demonstrates competency in this unit must be able to:<br>• monitor and apply environmental regulations and sustainability best practice as they apply in an automotive mechanical workplace<br>• identify materials used in an automotive mechanical workplace and assess their potential environmental impact<br>• monitor and record environmental damage and breaches to environmental regulations. |
| **Context of and specific resources for assessment** | Competency is to be assessed in the workplace or a simulated workplace environment that accurately reflects performance in a real workplace setting.<br>Assessment is to occur:<br>• using standard workplace practices and procedures<br>• following safety requirements<br>• applying environmental constraints.<br>Assessment is to comply with relevant:<br>• regulatory requirements<br>• Australian standards<br>• industry codes of practice.<br>The following resources must be made available for the assessment of this unit:<br>• access to environmental legislation, regulations and best practice models<br>• access to an automotive workplace or simulated environment that accurately reflects automotive workshop working conditions<br>• access to workplace documents and reference images<br>• access to personal protective equipment of the type intended to |


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| EVIDENCE GUIDE | |
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| | be used in response to an environmental incident or accident. |
| **Method of assessment** | Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.<br><br>Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with the application of required skills and knowledge.<br><br>Assessment methods must be by direct observation of tasks and include questioning on required skills and knowledge to ensure correct interpretation and application.<br><br>Competence in this unit may be assessed in conjunction with other units which together form part of a holistic work role.<br><br>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate the needs of diverse clients.<br><br>Assessment processes and techniques must be culturally sensitive and appropriate to the language, literacy and numeracy capacity of the candidate and the work being performed. |


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# Range Statement

| **RANGE STATEMENT** | |
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| The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included. | |
| ***Ethical environmental practice*** may include: | • legislative obligations<br>• environmental legislation<br>• health regulations<br>• hazardous materials handling procedures<br>• organisation insurance requirements<br>• discretion, judgement and problem-solving skills in undertaking environmentally sound work practices. |
| ***Documents and procedures*** may include: | • material safety data sheets (MSDS)<br>• hazardous substances register<br>• workplace environmental procedures and safety instructions<br>• dangerous goods code safe operating procedures. |
| ***Hazards*** may include: | • toxic fumes and substances<br>• flammable materials and fire hazards<br>• spillages<br>• waste and debris especially on floors, ladders, trolleys<br>• electricity and water<br>• toxic substances<br>• damaged packing material or containers<br>• broken or damaged equipment<br>• unsafe lifting practices. |
| ***Safety equipment and other material*** may include: | • personal protective equipment (PPE) including:<br>  • eye protection<br>  • hearing protection<br>  • gloves<br>  • other suitable protective clothing<br>  • safety footwear<br>• spill kit<br>• absorbent materials<br>• drip and catchment trays<br>• waste bags<br>• waste segregation systems |
| ***Contaminants*** may include: | • solid or liquid wastes<br>• oil, fuel and grease |


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| RANGE STATEMENT | |
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| | • hydrocarbon based degreasing agents and solvents<br>• acids<br>• alkaline wastes<br>• paint, lacquer, varnish<br>• glues and adhesive compounds<br>• household chemicals and pesticides. |
| ***Sustainability best practice*** may include: | • recycling waste<br>• energy conservation practices<br>• natural resources (water, etc.) conservation practices<br>• reusing<br>• environmental (green) purchasing practices<br>• noise minimisation. |

## Unit Sector(s)

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| **Field of Competency** | Common |
| **Unit Sector** | Environment |

## Custom Content Section

Not applicable.


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