



Australian Government

MSS015030 Conduct an emissions audit

Release: 1

MSS015030 Conduct an emissions audit

Modification History

Release 1. Updated unit code. Changes to performance criteria. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Application

This unit describes the skills and knowledge required to conduct an audit of emissions related to product or process in an organisation, or part or all a value chain, with the emphasis on using material balancing techniques to inform decision making.

The audit may be conducted to assist in regulatory compliance or as part of a strategy to improve the sustainability of operations.

This unit applies to a manager or technical specialist who has a major responsibility for sustainability as part of a broader work role or sustainability may be their primary work responsibility. The manager or technical specialist may undertake this alone or as part of a team.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil

Competency Field

Sustainable operations

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | |
|--|---|
| 1 Identify all sources and uses of materials in process | 1.1 Identify all sources of materials external to the site |
| | 1.2 Identify all sources of materials within the site |
| | 1.3 Identify all uses of materials by the process overall |
| | 1.4 Identify all uses of materials by each process unit |

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
2	Calculate theoretical use of the materials	2.1	Calculate theoretical net consumption of material for each process unit
		2.2	Calculate overall material balance for process or site
		2.3	Evaluate the need for material consumption by process and units within the process compared to alternative processes or units
3	Measure actual use of materials	3.1	Calculate actual net material consumption for overall process or site
		3.2	Calculate actual net material consumption for each process unit
		3.3	Calculate difference between theoretical and actual material consumption by unit and overall
		3.4	Identify actual emissions by each process unit
4	Develop strategies for reducing emissions	4.1	Rank units by difference between theoretical and actual material consumption
		4.2	Rank units by actual material consumption
		4.3	Develop strategies to reduce material consumption
5	Prepare a recommendation for an emissions reduction strategy	5.1	Consult with key stakeholders
		5.2	Identify strategies required to meet regulatory requirements
		5.3	Rank strategies by cost benefit ratio
		5.4	Short-list preferred emission reduction strategies
		5.5	Write report to provide recommendation for reducing emissions

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS015012 Conduct an emissions audit.

Links

The MSS Sustainability Companion Volume implementation Guides are available from VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS015030 Conduct an emissions audit

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- conduct at least 1 emissions audit for one or more products, processes, value chain or part of value chain.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- type and nature of emissions
- types of materials
- material balancing techniques for process and process steps (also known as mass balancing)
- methods of measuring actual process amount and flows
- emission reduction strategies and methods along with costs, effectiveness and alternative disposal strategies caused
- cost-benefit analysis
- legislation, regulations and protocols relevant to emissions audit.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions, contingencies, facilities, equipment and resources.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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