



Australian Government

Assessment Requirements for MSS025025 Monitor and evaluate noise

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Performance Criteria changed. Foundation Skills populated. Range of Conditions removed. Assessment Requirements changed. Supersedes and is not equivalent to MSS025008 Monitor and evaluate noise.

Performance Evidence

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

- prepare for and conduct at least 2 noise surveys using at least one handheld sound level meters and at least one fixed noise monitoring station
- process, evaluate, verify and report data from at least 2 noise surveys.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- scientific terminology, concepts and principles, including:
 - sound and noise
 - frequency, pitch and wavelength
 - sound power and acoustic energy
 - sound levels, pressure and intensity
 - sound propagation with distance
 - measurement units (dBA and others)
 - adding and subtracting sound levels
 - physiology of hearing
 - perception of noise
 - sources of noise, point sources and line sources
 - types of noise, such as continuous, intermittent and impulsive
 - typical noise levels
 - frequency weighting curves
- function of key components and operating principles of sound level meters, integrating-averaging meters, personal sound exposure meters and/or noise measuring instruments, including response, sensitivity, range, and hold circuits
- calibration of handheld sound measuring instruments
- effects on test results of modifying meter/instrument settings
- measurement methods, including techniques for:

- measuring different noise types, including steady noise, discretely varying noise and impulsive noise
- methods for measuring noise exposure, including equivalent continuous sound level (Leq)
- common sources of uncertainty in sound level measurement, including mishandling of equipment, meteorological conditions, effects of topography and built structures, reflected and absorbed sound, and background noise effects
- significant site features relevant to noise measurement including noise sources, direction and approximate distance, barriers and structures, noise sensitive areas and adjacent land uses
- data processing techniques, including:
 - frequency analysis and weighting networks (including at least A and Z)
 - calculation of combined sound levels using graphical and mathematical equation techniques
 - statistical analysis, including LA10, LA50 and LA90
 - time average (equivalent continuous) measurement (LAeqT)
 - characterisation of noise by octave band analysis, narrow band analysis, FFT and sound character
 - background noise calculations, background noise level (LA90)
 - day, evening, and night sound levels (Lden)
 - calculation of individual noise exposure
 - noise mapping
 - noise rating curves
- regulatory requirements related to environmental noise measurement including legislation, policies and codes of practice, noise standards and statutory noise limits
- procedures for maintaining, storing and transporting noise measurement equipment and instrumentation
- common site hazards and control measures
- health, safety and environment requirements, including field safety and survival principles.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - site monitoring plan and related test methods and field protocols
 - noise measuring equipment, data loggers and telemetry equipment required in site monitoring plan
- modelling of industry operating conditions, including:
 - access to site/s.

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

Links

Companion Volume Implementation Guides are found in VETNe -

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