



Australian Government

MSL952001 Collect routine site samples

Release: 1

MSL952001 Collect routine site samples

Modification History

Release 1. Supersedes and is equivalent to MSL952001A Collect routine site samples

Application

This unit of competency covers the ability to collect samples at field or production sites using specified equipment and standard or routine procedures.

This unit of competency is applicable to production operators, field assistants and laboratory assistants in all industry sectors.

While no specific licensing or certification requirements apply to this unit at the time of publication, laboratory operations are governed by relevant legislation, regulations and/or external accreditation requirements. Local requirements should be checked.

Pre-requisite Unit

Nil

Competency Field

Sampling

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1	Prepare for sampling	1.1	Confirm the purpose, priority and scope of the sampling request
		1.2	Liaise with relevant personnel to arrange site access and all necessary clearances/permits
		1.3	Identify site hazards and review workplace safety procedures
		1.4	Confirm what samples are to be collected, from where, how and when
		1.5	Assemble all specified sampling equipment, safety equipment, materials and containers

- 1.6 Conduct pre-use and cleanliness checks of all items to ensure they are fit for purpose
 - 1.7 Check all items against given inventory and stow them to ensure safe transport
- 2 **Conduct sampling**
 - 2.1 Locate sampling points and services at the site
 - 2.2 Remove security devices, such as locks and covers as required
 - 2.3 Seek advice if the required samples cannot be collected or if procedures require modification
 - 2.4 Select and use required sampling equipment in accordance with given procedures
 - 2.5 Closely follow sampling procedures to obtain required samples and maintain their integrity
 - 2.6 Record all labelling information in accordance with workplace/legal traceability requirements
 - 2.7 Record sample appearance, environmental conditions and any other factors that may impact on sample integrity
 - 2.8 Replace security devices, such as locks and covers as required
- 3 **Finalise sampling**
 - 3.1 Follow workplace procedures for the cleaning/decontamination of equipment and vehicle as necessary
 - 3.2 Check all equipment, materials and samples against inventory and stow for safe transport
 - 3.3 Liaise with relevant personnel to restore normal production and/or services as necessary
 - 3.4 Maintain integrity of samples during transportation
 - 3.5 Deliver samples to the required collection point and complete all documentation to ensure traceability
 - 3.6 On return, check and document serviceability of

equipment before storage

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| 4 | Maintain a safe work environment | 4.1 | Use established work practices and personal protective equipment (PPE) to ensure personal safety and that of others |
| | | 4.2 | Minimise environmental impacts of sampling and generation of waste |
| | | 4.3 | Dispose of all waste in accordance with workplace procedures |

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.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

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| Standards, codes, procedures and/or workplace requirements | Standards, codes, procedures and/or workplace requirements include the latest version of one or more of: <ul style="list-style-type: none"> • Australian and international standards covering the requirements for the competence of testing and calibration laboratories, laboratory safety, quality and environmental management, and sampling of materials • national work health and safety (WHS) standards and codes of practice, national environmental protection measures, and national measurement regulations and guidelines • specific codes, guidelines and procedures, such as National Association of Testing Authorities (NATA) accreditation requirements, and principles of good laboratory practice (GLP) • workplace documents, such as standard operating procedures (SOPs); quality and equipment manuals; calibration and maintenance schedules; material safety data sheets (MSDS); safety procedures; material, production and product specifications; production and laboratory schedules; workplace recording and reporting procedures; waste minimisation and safe |
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- disposal procedures; and maps and site plans
- sampling procedures for specific samples, sites and clients (labelling, preparation, storage, transport and disposal)

Materials sampled

Materials sampled as part of job role include one or more of:

- gas or air samples
- water, wastewater, stormwater, sewage and sludge
- solid samples, such as soil, sediments, rocks, concrete, quarry and mining material, and solid wastes
- raw materials, start, middle, end of production run samples, and final products and materials used in production processes, including food and beverages
- hazardous materials and/or dangerous goods

Maintenance of integrity of samples

Maintenance of integrity of samples includes one or more of:

- use of appropriate containers and lids, sealing of sample containers
- purging of sample lines and bores
- decontamination of sampling tools between collection of consecutive samples
- use of appropriate preservatives
- temperature control, which may involve prevention of direct contact between the sample and coolant, and wrapping container in foil or wet newspaper
- transfer of sterile sample into sterile container
- monitoring of storage conditions
- workplace/legal traceability through appropriate sample labelling and records

Services

Services include one or more of:

- water supply, gas and electricity
- telecommunications
- irrigation, stormwater and drainage systems
- production plant

Safety procedures

Safety procedures include, but are not limited to, one or more of:

- use of PPE
- handling, labelling and storing hazardous material and equipment in accordance with labels, MSDS, manufacturer instructions and

- workplace procedures and regulations
- regular cleaning and/or decontamination of equipment
- use of machinery guards
- signage, barriers, service isolation tags, traffic control and flashing lights, lock out and tag-out procedures

Minimising environmental impacts

Minimising environmental impacts includes, but is not limited to, one or more of:

- replacement of soils and vegetation
- driving vehicles to minimise soil erosion and damage to fauna and vegetation
- appropriate disposal of surplus, spent or purged materials and hazardous waste
- recycling of non-hazardous wastes
- cleaning of vehicles and equipment to prevent transfer of pests and contaminants

WHS and environmental management requirements

WHS and environmental management requirements include:

- complying with WHS and environmental management requirements at all times, which may be imposed through state/territory or federal legislation. These requirements must not be compromised at any time
- applying standard precautions relating to the potentially hazardous nature of samples
- accessing and applying current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health, where relevant

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSL952001A Collect routine site samples

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL952001 Collect routine site samples

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Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- locating services at sites
- collecting samples at field or production sites on at least three (3) occasions using specified equipment and standard/routine procedures
- collecting at least three (3) different types of samples
- collecting samples efficiently, safely and with minimal environmental impact in accordance with sampling procedures and plans
- maintaining the integrity and security of samples following safety procedures, workplace and/or legal traceability requirements
- completing sampling records using workplace procedures
- recognising own limitations and seeking timely advice
- liaising with others to access sites and conduct sampling efficiently.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- terminology and concepts, including sample, contamination, traceability, integrity and chain of custody, metrology and the international system of units (SI)
- types of samples, including grab samples (disturbed or undisturbed materials), composite samples (such as time, flow proportioned and horizontal/vertical cross section), and quality control samples (such as controls, background, duplicate and blanks)
- characteristics of product/materials sampled as part of job role
- purpose for which the samples have been collected
- function of key sampling equipment/materials and principles of operation
- sampling procedures covering labelling, preparation, storage, transport and disposal
- hazards, risks, environmental protection measures and work health and safety (WHS) procedures associated with routine sampling undertaken
- workplace procedures dealing with waste management, clean-up and spillage, handling, transport and storage of dangerous goods.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in each case).
- This unit of competency may be assessed with:
 - MSL972001 Conduct routine site measurements
- Holistic assessment methods include:
 - review of sampling documentation completed by the candidate
 - review of the quality of samples collected by the candidate
 - observation of the candidate collecting a variety of samples at a range of sites
 - feedback from supervisors and clients that sampling plans were followed
 - oral/written questioning about sampling and safety procedures.
- Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to:
 - field or production sites to sample and a variety of sample types
 - sampling tools, containers, equipment and procedures.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competence and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience.
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with a laboratory about performing the competency being assessed within the last twelve months.

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