



Australian Government

MSL954007 Obtain representative samples in accordance with sampling plan

Release: 1

MSL954007 Obtain representative samples in accordance with sampling plan

Modification History

Release 1. Supersedes and is not equivalent to MSL954004 Obtain representative samples in accordance with sampling plan. Removal of element for sample preparation. Minor changes to Performance Criteria. Changes to Knowledge Evidence for clarity.

Application

This unit of competency describes the skills and knowledge to obtain a range of samples that are representative of the source material and to prepare the samples for testing. All sampling activities are conducted in accordance with a defined sampling plan. This unit does not cover the subsequent testing of the samples.

This unit of competency applies to laboratory technicians in all industry sectors.

No licensing or certification requirements exist at the time of publication. However, regulations and/or external accreditation requirements for laboratory operations exist, so local requirements should be checked. Relevant legislation, industry standards and codes of practice within Australia must also be applied.

Competency Field

Sampling

Elements and Performance Criteria

Elements	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 sampling location, number and type of samples, and timing and frequency of sampling from workplace or client's sampling plan 1.2 Liaise with relevant personnel to arrange site access and all necessary clearances and/or permits 1.3 Select sampling equipment and conditions to achieve representative samples and preserve sample integrity during collection, storage and transit 1.4 Check that all procedures are in accordance with client or workplace requirements, relevant standards and codes 1.5 Identify site and sampling hazards and review workplace safety

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	procedures 1.6 Assemble and check all sampling equipment, materials, containers and safety equipment 1.7 Arrange suitable transport to, from and around site as required
2. Conduct sampling and log samples	2.1 Locate sampling sites 2.2 Conduct representative sampling in accordance with sampling plan and workplace procedures, limiting hazard or contamination to samples, self, work area and environment 2.3 Record all information and label samples in accordance with traceability and chain of custody requirements 2.4 Record environment or production conditions and any atypical observations made during sampling that may impact on sample representativeness or integrity 2.5 Transport all samples back to base in accordance with procedures and relevant codes
3. Address client issues	3.1 Ensure that information provided to client is accurate, relevant and authorised for release 3.2 Maintain security and confidentiality of all client and workplace data and information
4. Maintain a safe work environment	4.1 Clean all equipment, containers, work area and vehicles in accordance with workplace procedures 4.2 Check serviceability of all equipment before storage 4.3 Use defined safe work practices and personal protective equipment (PPE) to ensure personal safety and that of other personnel 4.4 Minimise the generation of wastes and environmental impacts 4.5 Ensure the safe collection of all hazardous wastes for appropriate disposal

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

No equivalent unit.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet – -

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

Assessment Requirements for MSL954007 Obtain representative samples in accordance with sampling plan

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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:

- obtained samples from at least 3 different sampling points, that are representative of the source material and taken in accordance with a sampling plan.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of representative sampling, including:
 - representative samples
 - preservation of integrity of samples
 - maintaining identification of samples relative to their source, workplace and legal traceability
 - cost-effectiveness of sampling
 - consistency of sampling procedures
 - random, systematic and stratified sampling
- function of key sampling equipment and materials, and principles of operation
- characteristics of product and/or materials sampled as part of job role and likely contaminants
- methods to maintain the integrity of samples and when preservation may be needed
- maps and site plans
- quality control procedures for sampling including controls, background, duplicates and blanks
- sampling plans and/or inspection and test plans
- site and sampling hazards and the links between following WHS procedures and personal and environmental safety, particularly at high-risk sites
- workplace and legal traceability and chain of custody requirements
- environmental sustainability issues as they relate to the work task
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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:
 - source material
 - different sample types
 - sampling plans and procedures, sampling containers and sampling equipment
 - workplace procedures.

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

Links

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