

<b>Title</b>	<b>Describe and plan sampling; and collect, store, and transport samples at a surface extraction site</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	People credited with this unit standard are able to: describe the purposes and objectives of sampling of bulk materials, and types of equipment used, and plan and implement sampling; collect, store and transport samples; and record, report and complete documentation for samples, at a surface extraction site.
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<b>Classification</b>	Extractive Industries > Surface Extraction
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Performance of the outcomes of this unit standard must comply with the following:
  - Health and Safety at Work Act 2015 (HSW);
  - Health and Safety at Work (General Risk and Workplace Management) Regulations 2016;
  - Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016;
  - Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016;
  - approved codes of practice issued pursuant to the HSW Act;
  - NZS 4407:2015 *Methods of sampling and testing road aggregates*.
- 2 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 3 **Definition**  
*Industry best practice* refers to those practices which competent practitioners within the industry recognise as current industry best practice. These may be documented in management plans, company procedures or requirements, managers' rules, occupational health and safety policy, industry guidelines, codes of practice, manufacturers' instructions, and safe working and/or job procedures (or equivalent).
- 4 This unit standard is intended for, but is not limited to, workplace assessment.

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## Outcomes and performance criteria

### Outcome 1

Describe the purposes and objectives of sampling of bulk materials, and types of equipment used, and plan and implement sampling at a surface extraction site.

#### Performance criteria

- 1.1 The purposes and objectives of sampling are described in terms of materials being sampled.
- Range product monitoring, raw material and processed product analysis, contaminant identification, physical and chemical make-up of the material, market requirements, quality control.
- 1.2 Field or processing plant sampling of material is planned and implemented in accordance with contract specifications and industry best practice.
- Range sample point location, sampling frequency, sampling quantity, analysis location and conditions, sampling duration.
- 1.3 The types of sampling equipment for various materials are described in accordance with NZS 4407:2015 and industry best practice.
- Range equipment may include but is not limited to – slurry and liquid samplers, free-flowing material systems, conveyor samplers (belt-end, mid-belt), probe samplers, cross-cut samplers, gravity chute samplers, pneumatic line samplers, riffle boxes, splitters, batter boards.

### Outcome 2

Collect, store, and transport samples at a surface extraction site.

#### Performance criteria

- 2.1 The type of sampling containers are identified and sampled materials are collected and stored in accordance with NZS 4407:2015 and industry best practice.
- Range may include but is not limited to – sacks and bags, sealed cylinders and boxes, specially designed containers.
- 2.2 The methods of transport are described in terms of terms of the sample type and industry best practice.
- 2.3 Samples are transported in accordance with the sample type and industry best practice.

**Outcome 3**

Record, report, and complete documentation for samples at a surface extraction site.

**Performance criteria**

3.1 Records are completed in accordance with industry best practice and market requirements.

3.2 Reports are completed in accordance with industry best practice and market requirements.

Range quantity, time, material type, weight, sample source, sampler number, purpose, analysing agent or laboratory.

3.3 Documentation is completed in accordance with NZS 4407:2015, industry best practice, and market requirements.

Range certification, company requirements, dispatch, laboratory documents.

<b>Planned review date</b>	31 December 2022
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	31 July 2001	31 December 2019
Review	2	23 September 2005	N/A
Rollover and Revision	3	16 July 2010	N/A
Rollover and Revision	4	25 January 2018	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0114
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact MITO New Zealand Incorporated [info@mito.org.nz](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.