

<b>Title</b>	<b>Demonstrate knowledge of earthworks in relation to the environment</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>4</b>

<b>Purpose</b>	People credited with this unit standard are able to describe environmental implications of earthworks and environmental controls for earthworks.
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<b>Classification</b>	Infrastructure Works > Infrastructure Civil Works
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<b>Available grade</b>	Achieved
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### Guidance Information

Recommended reference material:

Company environmental management documents;

*RMA Guide (Green Book)*, available from the Infrastructure ITO at:

<http://www.infrastructureito.org.nz/>;

A recognised source of best practice for water control, such as the erosion and sediment control guidelines produced by regional councils, including but not limited to – Auckland Council (TP90 *Erosion and sediment control guidelines for land disturbing activities in the Auckland Region*, 1999), Environment Waikato, Environment Bay of Plenty, Wellington Regional Council.

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### Outcomes and performance criteria

#### Outcome 1

Describe environmental implications of earthworks.

#### Performance criteria

1.1 Description illustrates negative environmental effects of earthworks if poorly controlled.

Range erosion, contaminated water, sediment, noise, dust, fuel oil, fire, vibration, visual impact, social disruption, penalties, damage to sacred or historical place.

1.2 Description includes examples to show how environmental management affects the way earthworks are planned and carried out.

Range includes but is not limited to – sequence and processes, timing, location, operator training.

## Outcome 2

Describe environmental controls for earthworks.

### Performance criteria

2.1 Description identifies controls to eliminate or reduce the negative environmental effects from earthworks.

Range erosion, contaminated water, sediment, noise, dust, fuel oil, fire, vibration, visual impact, social disruption, damage to sacred or historical place.

2.2 Water controls are described in terms of purpose and features.

Range may include but is not limited to – drains, culverts, subsoil drains, fluming, fresh water cut-off diversion ponds and drains, dams, water detention ponds; evidence of three is required.

2.3 Erosion and sediment controls are described in terms of purpose and features.

Range may include but is not limited to – hydroseeding, planting, mulching, silt fences, silt traps, sediment retention ponds, silt socks, hay bales, geotextiles; evidence of four is required.

<b>Replacement information</b>	This unit standard and unit standard 20624 were replaced by unit standard 31478.
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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2003	31 December 2014
Review	2	17 September 2010	31 December 2016
Review	3	19 February 2015	31 December 2021
Review	4	27 September 2018	31 December 2021

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.