

Field Engineering and Technology

Registration of skill standards and review, and rollover and revision of unit standards for *Extractive Industries*

Subfield	Domain	ID
Extractive Industries	Extractive Industries Management	17694, 21151, 21152, 26855, <i>30904</i>
	Underground Extraction	7146, 7164, 21278, <i>21281, 21662, 30900</i>

Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council has completed the review of the unit standards listed above. The standards in italics have been rolled over and revised (R&R).

Date new versions published

September 2025

**Planned review date (for reviewed standards)
(for R&R unit standards)**

**December 2030
December 2027**

Summary

The review of these standards was overdue as this industry has undergone an extensive health and safety review, resulting in more stringent regulatory requirements identifying specific unit standards required for compliance. The Technical Advisory Group (TAG) consisted of industry, regulatory bodies and providers who have consent to assess.

All unit standards were updated in line with current industry practices, standards, acts and regulations. This was done in consultation with industry representatives and providers with consent to assess during many online TAG meetings.

There is currently no underground coal mining activity in New Zealand, and the three underground coal mining standards (21281, 21662 and 30904) are not currently being used. It is anticipated that these may be required in the future with government plans to reopen underground coal mining, therefore they were rolled over and revised.

Where unit standards needed major changes requiring replacement standards (Category C), Hanga-Aro-Rau replaced these with new skill standards.

Main changes

- Guidance Information was updated to reflect current legislation across all standards.
- Standard Setting Body details were changed from MITO to Hanga-Aro-Rau Workforce Development Council.
- Planned review date for unit standards 30904 (Extractive Industries Management) and 21281 and 21662 (Underground Extraction) were extended.

Extractive Industries Management

- Unit standard 21151; outcomes 1, 2 and 3 were updated to better reflect the level of understanding expected of learners, with performance criteria in Outcome 3 adjusted accordingly. Performance criterion 1.3 was updated to include consultation with iwi and the wider community.
- Unit Standard 26855; title was amended. Outcome 1 was adjusted to align more closely with the intent of the performance criteria. Outcome 2 was refined to highlight core concepts and principles, with unnecessary range statements removed for simplicity. In Outcome 3, performance criteria 3.1 and 3.2 were combined to streamline the content.

- Unit standards 17694 and 21152 have been set to expire, since these standards no longer reflect the needs of industry.
- New skill standards 40822, 40823 and 40824 have been developed to reflect the needs of the extractive industry explosive knowledge and skills, specifically in regard to the Certificate of Competency requirements to oversee blasting operations.
- Unit standard 30904 title was updated.

Underground Extraction

- Unit standards 7164, 21278 and 21662; titles were updated. Unit standard 7164 outcome 4 was amended to include the context.
- Unit standard 7146 was set to expire and replaced by skill standard 40825. This new skill standard has been developed to more accurately reflect current underground safe working practices.
- Where expiring unit standard 7146 is listed as a prerequisite in another standard, this has been updated to the replacement skill standard 40825.
- Unit standard 30900 prerequisite was updated. Outcome 2 was revised to use the term “testing” instead of “measuring,” to more accurately reflect the required performance.

Category C and D unit standards will expire at the end of December 2027

The last date for assessment of superseded versions of Category B unit standards is December 2027

Impact on Consent and Moderation Requirements (CMR)

Current unit standards listed below have been transferred to CMR 0014.

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Rolled over and Revised unit standards

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
30904	Demonstrate knowledge of mining methods, and analyse and select plant for underground coalmines Demonstrate knowledge of mining methods, and analyse and select plant for underground coal mines	6	20

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit
21281	Test for gases, interpret findings, and demonstrate knowledge of follow-up actions in an underground coal mine	4	15
21662	Demonstrate knowledge of development and extraction plant and methods for underground coal mining Demonstrate knowledge of development and extraction plant and equipment, and methods for underground coal mining	4	15

Reviewed unit standards

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit	Review Category
17694	Demonstrate knowledge of explosives and their properties	3	10	D
21151	Demonstrate knowledge of planning rehabilitation operations for an extractive site	6	15	B
21152	Demonstrate and apply knowledge of storing explosives for use	4	10	D
26855	Analyse Human Factors present in workplace practices at an extractive site Analyse human factors present in workplace practices at an extractive site	4	10	B
40822	Determine compliance and safety management obligations for explosives in an extractive blasting operation	4	5	NEW
40823	Manage surface extractive blasting operations	4	10	NEW
40824	Manage underground extractives blasting operations	4	10	NEW

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit	Review Category
7146	Demonstrate basic knowledge and ability required to work in an underground operation	2	6	C
40825	Prepare to work safely in an underground extractive operation	2	6	
7164	Describe and operate a winding engine in an underground extractive site Evaluate and operate a winding engine in an underground extractive site	4	15	B
21278	Describe, install, and reassess support systems for an underground operation Explain and install support systems for an underground operation	4	15	B
30900	Test for gases, interpret findings, and demonstrate knowledge of follow-up actions in a non-coal underground operation	4	15	B