

Field Engineering and Technology

Review, and Rollover and Revision of *Extractive Industries* unit standards

Subfield	Domain	ID
Extractive Industries	Extractive Industries Management	17691, 17744, 21156, 22057, 30903
	Underground Extraction	7145 , 15669, 17705

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

Date new versions published

June 2025

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

**December 2029
December 2027**

Summary

The review of these unit standards was long overdue as this industry has undergone 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.

There is currently no underground coal mining activity in New Zealand, and the two underground coal mining standards are not presently being used. These standards have been updated to reflect current legislation and terminology. The planned review date was also extended pending full review of these unit standards.

Main changes

- Guidance Information was updated to reflect current legislation.
- Standard Setting Body was changed from MITO to Hanga-Aro-Rau Workforce Development Council.
- Titles for unit standards 15669, 17705, 21156, 22057 and 30903 were changed to more accurately reflect the significant outcome(s) within these standards.
- Terminology was updated to reflect industry standards and practical applicability, such as changing 'best' practice to 'good' practice. Minor adjustments were made to range statements to reflect current practices.

Extractive Industries Management

- Unit standard 17691 - removed a range statement from performance criterion (pc) 1.1 and made minor adjustments to other range statements to clarify expectations and requirements.
- Unit standard 17744 - pcs changed from "plan" to state "site plan" for more clarity. Two pcs were added, and pc 1.4 was amended to when "reading" a site plan to reflect the outcome more clearly.
- Unit standard 21156 - added to Guidance Information overarching qualifier "assessment needs to reference to Resource Management Act (1991) (RMA) and be in accordance with industry good practices and company procedures". Range statement was removed from pc 2.2, and pc 3.2 from the previous version as no longer required and covered in other pcs in outcome 3. Therefore, pc 3.3 is now pc 3.2.
- Unit standards 22057 and 30903 - outcomes and pcs amended to more accurately reflect content, and for readability.

Underground Extraction

- Unit standard 15669 - outcomes and pcs amended to “explain” to more accurately reflect required outcomes.
- The planned review date for unit standards 7145 and 17705 was extended from 31 December 2022 to 31 December 2027.

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

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 > Underground Extraction

ID	Title	Level	Credit
7145	Design and maintain effective ventilation systems for an underground coal mine	5	20
17705	Describe, develop and maintain basic ventilation systems for an underground coal mine Develop and maintain basic ventilation systems for an underground coal mine	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
17691	Use mathematics to solve problems in an extractive industries workplace	4	15	B
17744	Read and interpret extractive site plans	4	5	B
21156	Demonstrate knowledge of planning and managing extraction to minimise environmental impacts Evaluate programmes to minimise environmental impacts in the planning and managing of extraction operations	5	15	B
22057	Demonstrate knowledge of pneumatic and hydraulic power systems used in extractive operations Explain pneumatic and hydraulic plant and equipment used in extractive operations	4	7	B
30903	Demonstrate knowledge of mining methods, and analyse and select plant for metalliferous underground extraction Evaluate mining methods, and analyse and select plant for metalliferous underground extraction	6	20	B

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit	Review Category
15669	Demonstrate knowledge of tunnelling methods, and selection of plant and equipment for tunnelling Explain tunnelling methods, and selection of plant and equipment for tunnelling	5	15	B