

Registration of skill standards and review of *Resource Recovery* unit standards

| Subfield | Domain | ID |
|-------------------|-----------------------|---|
| Resource Recovery | Composting | 23290 – 23297, 23305 – 23307, 23309 – 23311, 23313, 23315 – 23319, 23652, |
| | Scrap Metal Recycling | 22651 – 22654, 22657, 22659 – 22670, 22672, 22674 |

Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council has completed the review of 40 unit standards listed above and registration of 15 skill standards listed below.

Date new versions published

March 2025

Planned review date

December 2029

Summary

Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council undertook a combined review of Resource Recovery qualifications [Refs: 2743, 2744 and 2745] and associated unit standards.

Two specialist technical advisory groups were established to develop new skill standards for metal recycling and composting. Online meetings were held fortnightly throughout March – December 2024 with representatives from Metal Recycling Association of New Zealand, Bioenergy Association of New Zealand, employers and subject matter experts.

Since none of the unit standards have been used in the past five years, most existing unit standards were expired without replacement. New skill standards were developed to reflect current industry practices and technologies. All changes outlined below were made in close consultation with industry stakeholders.

Main changes

- 34 unit standards were expired without replacement.
- 6 unit standards were expired and replaced with 5 new skill standards.
- 10 new skill standards were developed.

Category C and D unit standards will expire at the end of December 2025

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

All changes are in **bold**.

| 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 |

Service Sector > Resource Recovery > Composting

| ID | Title | Level | Credit | Review Category |
|--------------|--|----------|-----------|-----------------|
| 23290 | Identify organic materials suitable for bio-energy feedstock | 2 | 1 | D |
| 23291 | Demonstrate knowledge of composting worms and the environment required for vermicomposting for resource recovery | 2 | 3 | D |
| 23292 | Describe and evaluate homemade and commercial vermicomposting units for domestic composting | 2 | 5 | D |
| 23293 | Describe the processes of sourcing, preparing, and adding feedstock for vermicomposting for resource recovery | 2 | 1 | D |
| 23294 | Establish vermicomposting units for resource recovery activity and maintain the environment and microbiology | 3 | 5 | D |
| 23295 | Explain and conduct the separation of vermicompost from worms, and package worms for transportation | 3 | 4 | D |
| 23296 | Explain the issues related to vermicomposting and their effects on the worms and the vermicomposting unit | 3 | 2 | D |
| 23297 | Develop a production plan, and manage and report on the operation of a commercial vermicomposting unit | 5 | 12 | D |
| 23305 | Operate, and carry out basic maintenance, on an organic shredder at a composting facility | 3 | 15 | C |
| 40586 | Operate shredding equipment to process organic materials in a resource recovery environment | 3 | 15 | NEW |
| 23306 | Operate a screening plant and carry out basic maintenance at a composting facility | 3 | 15 | C |
| 40588 | Operate a screening plant in a resource recovery environment | 3 | 15 | NEW |
| 23307 | Describe and operate an in-vessel composting plant at a composting facility | 3 | 15 | D |
| 23309 | Operate compost turning equipment at a composting facility | 3 | 15 | C |
| 40587 | Carry out turning operations for compost production | 3 | 15 | NEW |
| 23310 | Prepare for bagging, operate, and shut down compost bagging plant at a composting facility | 3 | 15 | D |
| 23311 | Plan and schedule compost production for a composting facility | 5 | 20 | D |
| 23313 | Develop a composting recipe for a composting facility | 5 | 20 | D |
| 23315 | Review, implement, and monitor quality assurance and environment management for a composting facility | 5 | 20 | D |
| 23316 | Source, assess, and classify raw materials for composting | 4 | 10 | D |
| 23317 | Amend and prepare putrescible wastes for treatment and use in composting | 3 | 6 | D |
| 23318 | Describe the properties and applications of compost products and production issues at a composting facility | 4 | 5 | D |
| 23319 | Plan and develop a composting facility | 5 | 20 | D |
| 23652 | Prepare for and conduct on-site testing at a composting facility | 4 | 3 | D |
| 40583 | Identify feedstocks, methods and systems used in compost production | 2 | 2 | NEW |
| 40584 | Recognise health and safety and environmental risks relating to compost production | 3 | 5 | NEW |

| ID | Title | Level | Credit | Review Category |
|-------|--|-------|--------|-----------------|
| 40585 | Outline factors and processes required for optimal aerobic compost production | 3 | 5 | NEW |
| 40589 | Conduct sampling of compost materials and products for testing and laboratory analysis | 3 | 5 | NEW |
| 40590 | Develop a recipe for compost production | 4 | 10 | NEW |
| 40591 | Coordinate and monitor composting operations in a resource recovery environment | 4 | 20 | NEW |
| 40592 | Plan for compost production in a resource recovery environment | 4 | 10 | NEW |

Service Sector > Resource Recovery > Scrap Metal Recycling

| ID | Title | Level | Credit | Review Category |
|-------|---|-------|--------|-----------------|
| 22651 | Process scrap metal using gas cutting equipment | 3 | 5 | D |
| 22652 | Sort material at a fragmentiser sorting station | 3 | 4 | D |
| 22653 | Operate a static baler for recycling scrap metal | 3 | 4 | D |
| 22654 | Stockpile commodities at a scrap metal recycling yard | 3 | 5 | D |
| 22657 | Prepare to fill, and fill, an export container with scrap metal at a scrap metal yard | 3 | 3 | D |
| 22659 | Prepare end-of-life motor vehicles for scrap metal recycling | 2 | 3 | D |
| 22660 | Process whiteware for scrap metal recycling | 2 | 4 | D |
| 22661 | Control a fragmentiser for scrap metal recycling | 5 | 10 | D |
| 22662 | Operate a grab at a scrap metal recycling yard | 3 | 5 | C |
| 22663 | Operate a lifting magnet at a scrap metal recycling yard | 3 | 5 | C |
| 40595 | Operate a material handler and attachments for metal recycling | 3 | 15 | NEW |
| 22664 | Operate mobile shears for scrap metal recycling | 3 | 15 | C |
| 40594 | Operate mobile shears for metal recycling | 3 | 15 | NEW |
| 22665 | Operate a static shear for scrap metal recycling | 3 | 4 | D |
| 22666 | Operate an eddy current separator for scrap metal recycling | 3 | 6 | D |
| 22667 | Operate a cable stripper for scrap metal recycling | 3 | 4 | D |
| 22668 | Flatten end-of-life motor vehicles for scrap metal recycling | 3 | 3 | D |
| 22669 | Bale end-of-life motor vehicles and whiteware for scrap metal recycling | 3 | 4 | D |
| 22670 | Operate a granulator for processing scrap copper | 3 | 4 | D |
| 22672 | Demonstrate knowledge of the scrap metal recycling industry | 2 | 6 | D |
| 22674 | Recognise, classify, grade, value, and purchase nonferrous metals for scrap metal recycling | 5 | 120 | D |
| 40593 | Process and grade metals in a resource recovery environment | 3 | 20 | NEW |
| 40596 | Handle, store and prepare batteries for transport in a resource recovery environment | 3 | 5 | NEW |
| 40597 | Classify, grade and value ferrous and nonferrous metals for metal recycling | 4 | 15 | NEW |