

40593 Process and grade metals in a resource recovery environment

Kaupae Level	3
Whiwhinga Credit	20
Whāinga Purpose	<p>This skill standard is intended for people who are already working in a resource recovery environment which processes metals for recycling and/or re-use. People credited with this skill standard will be able to describe legal requirements for metal recyclers, identify metal grades and processing requirements, and process metals in a resource recovery environment.</p> <p>This skill standard aligns with the New Zealand Certificate in Resource Recovery (Level 3) with strands in Organic Materials Processing, Recovery and Recycling, and Metal Recycling [Ref: 2744].</p>
Whakaakoranga me mātua oti Pre-requisites	Learners/ākonga must have completed a workplace health and safety induction or demonstrate equivalent knowledge and skills.

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Describe legal requirements for metal recyclers.	a. Identify who is required to hold a secondhand dealer licence and secondhand dealer certificate.
	b. Describe requirements for holders of a secondhand dealer licence and secondhand dealer certificate and potential penalties for failure to comply with legal requirements.
	c. Describe articles relevant to metal recycling and their handling requirements.
2. Identify and sort metal grades in a resource recovery environment.	a. Identify and sort metal grades within different material streams in the workplace.
3. Identify metal processing requirements in a resource recovery environment.	a. Identify processes required to upgrade metal to its highest value.
	b. Identify and remove contaminants from the sorted metals.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
4. Process metals in a resource recovery environment.	a. Assess risks and follow risk controls of machinery and equipment used for processing metals.
	b. Process metals to maintain quality and safety requirements.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Evidence presented for assessment against this skill standard may include oral, visual, video, written and/or practical activities demonstrated in the workplace.

Evidence presented for assessment against this skill standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

Definitions

Articles refers to goods classified as an 'article' under the Secondhand Dealers and Pawnbrokers Act 2004. A list of defined articles is available on the New Zealand Police website listed below.

Metal recyclers are also referred as scrap metal dealers under the Secondhand Dealers and Pawnbrokers Act 2004.

ReMA refers to the Recycled Materials Association. This was previously called the Institute of Scrap Recycling Industries (ISRI).

Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the resource recovery industry.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Secondhand dealer requirements for metal recycling

- How to obtain a secondhand dealer licence or certificate including eligibility requirements.
- Secondhand dealer requirements including display of secondhand dealer certificate, record keeping, retention of articles, and access to goods.
- Offences and penalties for failure to comply with secondhand dealer requirements.

Grading

- Workplace acceptance criteria for metals.
- Grading requirements such as contamination limits, size, cleanness and free from foreign attachments or matter.
- Ferrous metals such as steel, iron, alloys which contain iron.
- Non-ferrous metals such as aluminium, copper, lead, brass, stainless steel, zinc.
- Specialty metals such as nickel, cobalt, alnico, titanium.
- Precious metals, including metals found in electronic waste, such as gold, palladium, platinum and silver.

Processing

- Contribution to site safety through hazard awareness, risk assessment and following risk controls.
- Safe handling of metals.
- Safe operation of machinery and equipment.
- Manual processing or dismantling with hand tools.

Rauemi | Resources

Legislation, regulations and industry guidelines relevant to this skill standard include but are not limited to:

- Hazardous Substances and New Organisms Act 1996.
- Health and Safety at Work Act 2015.
- Resource Management Act 1991.
- Secondhand Dealers and Pawnbrokers Act 2004.
- Weights and Measures Act 1987.
- Imports and Exports (Restrictions) Prohibition Order (No 2) 2004.
- Basel Convention 1989.
- B.I.G Safety and Logistics Group. (2021). B.I.G Safety Guidelines. Guidelines for the Safe Handling, Transportation, Collection, and Storage of Large Used Batteries. Available from: <https://big.org.nz/>.
- Environmental Protection Authority. Classification of hazardous substances. Available from: <https://www.epa.govt.nz/>.
- Environmental Protection Authority Victoria. (2021). Management and storage of combustible recyclable and waste materials – guideline. Available from: <https://www.epa.vic.gov.au/>.
- ReMA Specifications Guide. Available from: <https://www.isrispecs.org/>.
- Ministry for the Environment. (current edition). Waste electrical and electronic equipment: Guidance for collection, reuse and recycling (includes overview of other good practice guidelines). Available from: <https://environment.govt.nz/>.
- New Zealand Police. Scrap metal dealers information. Available from: <https://www.police.govt.nz/>.
- Worksafe New Zealand. (current edition). Best Practice Guidelines, Safe Use of Machinery. Available from: <https://www.worksafe.govt.nz/>.
- Worksafe New Zealand and Accident Compensation Corporation. Code of Practice for Manual Handling. Available from: <https://www.worksafe.govt.nz/>.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this skill standard will take precedence for assessment purposes, pending review of this skill standard. Legislation can be accessed at: <https://www.legislation.govt.nz>.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Service Sector > Resource Recovery > Scrap Metal Recycling
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0014

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	27 March 2025	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2029		

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development at qualifications@hangaarorau.nz to suggest changes to the content of this skill standard.