

## 40596 Handle, store and prepare batteries for transport in a resource recovery environment

<b>Kaupae   Level</b>	3
<b>Whiwhinga   Credit</b>	10
<b>Whāinga   Purpose</b>	<p>This skill standard is intended for people who are already working in a resource recovery environment which processes metals for recycling. People credited with this skill standard will be able to describe batteries and their safety requirements, and handle, store and prepare batteries for transport 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>
<b>Whakaakoranga me mātua oti   Pre-requisites</b>	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

<b>Hua o te ako   Learning outcomes</b>	<b>Paearu aromatawai   Assessment criteria</b>
1. Describe batteries and their safety requirements in a resource recovery environment.	a. Describe different battery types.
	b. Describe hazards, risks and risk controls for battery use and battery recycling.
	c. Identify when a dangerous goods endorsement is required for transporting batteries.
	d. Describe specific safety requirements for handling, storing and transporting lithium and other hazardous battery types.

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria
2. Handle and store batteries safely in a resource recovery environment.	a. Assess hazards and risks relating to battery handling and storage.
	b. Demonstrate emergency response procedures for a battery leak, fire or spill.
	c. Identify signs of damage or unsafe characteristics in batteries and follow workplace procedures where these are identified.
	d. Handle batteries safely for recycling and/or re-use.
	e. Store batteries safely for recycling and/or re-use.
3. Prepare batteries for transport or export in a resource recovery environment.	a. Classify batteries according to battery type.
	b. Prepare and package batteries correctly for transportation or export.
	c. Label and mark with correct hazardous material symbols and ID numbers.
	d. Complete transport or export documentation for batteries.

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

#### Assessment specifications:

- Evidence presented for assessment against this skill standard must include the following battery types: alkaline, lead acid, lithium ion, lithium-metal, nickel-cadmium, nickel-metal hydride.
- Emergency response procedures may be achieved using a simulated scenario.

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.

#### Definition

*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****Batteries**

- Identification of machinery and equipment that contain batteries.
- Hazards and risks specific to each battery type.
- Manufacturer Safety Data Sheets.

**Handling, storage and transport requirements**

- Correct use of personal protection equipment.
- Ventilation and temperature control.
- Segregation and isolation.
- Containment measures where required.
- Battery discharge if applicable.
- Preparation of batteries for transport to mitigate risks such as ignition, fire risks, spillage.
- UN-approved packaging for transporting hazardous materials.
- Permits and documentation.

**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.
- Land Transport Rule: Dangerous Goods 2005.
- Maritime Rules Part 24A: Carriage of Cargoes – Dangerous Goods.
- Civil Aviation Rules Part 92: Carriage of Dangerous Goods.
- Hazardous Substances (Classification) Notice 2017.
- Basel Convention.
- Imports and Exports (Restrictions) Prohibition Order (No 2) 2004.
- 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/>.
- International Maritime Organization. The International Maritime Dangerous Goods (IMDG) Code (refer Dangerous Goods in packaged form). Available from: <https://www.imo.org/en>.
- 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/>.
- SafeWork SA. Lead acid batteries. Available from: <https://safework.sa.gov.au/>.
- Worksafe. Safe use of lithium-ion batteries and battery products. 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**

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

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

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