HANDHELD BATTERY RECYCLING
Guidelines for transport

What can we recycle?

There are many types of batteries used in every household and business and they have different chemistries. Single-use batteries (non-rechargeable) can be either alkaline, zinc-carbon or lithium. These are used for products such as clocks, toys, cameras and remote controls. Rechargeable batteries are generally either lithium ion, nickel metal hydride or nickel cadmium. These are found in such products as mobile phones, laptops and power tools.

Rechargeable **lead acid batteries**, typically used for cars and backup power, need to be separated from the smaller handheld batteries for recycling. Larger batteries (>500g) also need to be separated. The Australian Battery Recycling Initiative's website (see below) contains contact information for companies that can collect and recycle lead acid and larger batteries.

How can we recycle safely?

Used batteries are potentially hazardous, so they need to be stored, handled and transported in accordance with hazardous waste and dangerous goods regulations. A risk assessment should be undertaken before any used batteries are transported. Manual handling of the recycling container should follow workplace health and safety regulations. All procedures must be documented.

Additional safety guidelines are provided on the next page.

Dangerous Goods Classification

UN 3028: Batteries, dry, containing potassium hydroxide solid, electric storage, Class 8
UN 3090: Lithium batteries, Class 9
UN 3480: Lithium ion batteries, Class 9

Poisons Hotline 13 11 26
Emergency 000

Australian Battery Recycling Initiative

The Australian Battery Recycling Initiative is a not-for-profit association established in 2008 to promote responsible environmental management of batteries at end of life. More information on battery recycling can be found on their website at www.batteryrecycling.org.au.

ABRI
Australian Battery Recycling Initiative

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State Government Victoria

What regulations apply?

Used batteries must be stored, handled and transported in accordance with hazardous waste and dangerous goods legislation. Workplace Health and Safety regulations must also be followed.

Hazardous waste legislation is different in every state and territory and is usually managed by the local Environment Protection Authority or equivalent.

Dangerous Goods regulations are generally managed by workplace health and safety authorities in each jurisdiction.

There is an exemption from certain Dangerous Goods packaging requirements for transporting used handheld batteries [1]. The batteries can be transported to an intermediate processing centre without being individually protected from short circuit, as long as a number of conditions are met. A copy of the exemption may be requested from the Australian Battery Recycling Initiative.

Note: The information provided here is general in nature. Organisations must do their own research to understand their legal obligations and to ensure that they are fully compliant.

How to recycle safely

DO

- Check your transport licensing conditions and waste tracking requirements before accepting used batteries.
- Carry out a risk assessment before starting to transport used batteries.
- Follow the packaging and transport requirements in the Australian Dangerous Goods Code (ADG Code) exemption 010/12[1] and ABRI's Packaging guidelines for used handheld batteries[2].
- Ensure that a copy of the Dangerous Goods exemption is carried by the driver.
- Implement a quality assurance system to ensure that the total amount of lithium batteries per transport unit does not exceed 333kg and that each container weighs no more than 400kg
- Comply with all of the relevant transport controls in the ADG Code and legislation.
- Carry appropriate firefighting equipment on the vehicle in case of a battery fire.
- Ensure that the vehicle has a satisfactory level of security to ensure that only trained people have access to the load.
- Ensure all drivers are trained in spill and emergency response.
- Always wear thick gloves and safety glasses if handling batteries.
- Wash your hands thoroughly with water if you make contact with leaking or damaged batteries.
- Ensure that the transport vehicle provides shelter from the weather, is well ventilated and easily accessible in case of a fire.

DON'T

- Don't store used batteries near any heat source (strong light, sun, oven, machinery).
- Don't store used batteries near other chemicals or food.
- Don't touch used batteries without protection. Damaged or leaking batteries may cause skin irritation or burns due to the presence of potassium hydroxide, which is highly corrosive.
- Don't store batteries too close to inhabited buildings.
- Don't attempt to lift heavy loads manually. Always seek help or put controls in place (removal trolley or forklift).
- Don't handle used batteries if you haven't been trained.
- Don't choose routes that could increase the risks of damage to the storage containers (such as unsealed roads) and compromise their integrity and suitability for further transport. Vibrations can also reduce the stability of certain types of batteries.
- Don't transport used handheld batteries with batteries weighting more than 500g or used lead acid batteries (ULABs). They need to be packaged separately as they have different regulatory requirements under the ADG Code.

(1) A copy of the exemption can be found on ABRI's website at: www.batteryrecycling.org.au.

(2) Available from ABRI's website at www.batteryrecycling.org.au.

ABRI Value Over Impact

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