



Typical items we accept:

- Appliance batteries (A type)
- Clock/radio batteries
- Button cells
- Vehicle batteries
- Mobile phone batteries

Statistics from WRAP show that the UK sends 6 million batteries to landfill each year. Many batteries contain dangerous chemicals and begin to rot away in landfill sites. These chemicals are released and leak into the ground which can cause soil and water pollution.

The battery collection and recycling targets increase every year in line with the Battery Directive target. Therefore in 2014 the UK had to ensure the collection of waste portable batteries (as a percentage of weight of batteries placed on the market), was equivalent to at least 35% , 40% in 2015 and 45% in 2016 and onwards.

OUR BATTERIES RECYCLING SOLUTION

Batteries are delivered to our Materials Recycling Facility (MRF) where they are segregated by type:

- Zinc-carbon and zinc-chloride - e.g. for clocks and radios.
- Alkaline - used in MP3 players, torches or toys.
- Button cell - contain mercury, silver, lithium or other heavy metals used in hearing aids, pacemakers and photographic equipment.
- Zinc-air - also used in hearing aids and radio pagers
- Silver oxide button cells - used in electronic watches and calculators.
- Lithium button cells - found in watches and photographic equipment

The recycling process involves a number of different procedures depending upon the type and material used in the battery. Certain batteries are treated directly due to hazardous chemicals/acids within them. It may involve draining the liquid core and dismantling the casing before being placed in a furnace at high temperature, leaving only the nickel, cadmium and other useful metals.

The high-temperature process vaporises paper, plastic and gels while the reusable metals like nickel, lead, iron, cobalt and cadmium are reclaimed to be re-used as raw materials in the manufacture of new batteries or stainless steel.

Button cell batteries containing mercury are usually recycled using a vacuum-thermal treatment, in which the mercury vaporises. Pure mercury recovered from batteries can be re-used in metric instruments and fluorescent lighting. Furthermore, Zinc concentrate recovered from batteries contains at least 40% zinc and is reused by zinc smelters and for electrolysis in industry. Jewellers can reuse the silver in silver oxide button cells and the nickel recovered from batteries can be used to manufacture stainless steel. Lastly, lead and cadmium can be re-used in new batteries.

Our digital data capture systems enable us to provide complete chain-of-custody reporting from collection to final destination. Electronic waste transfer consentment notes are issued for all materials we manage in compliance with your Duty of Care obligations.

The McGrath Group is accredited to various trade bodies and accreditations including PAS 402:2013. We also operate an integrated management system which is certified against international standards OHSAS 18001 (Health & Safety), ISO 9001 (Quality) and ISO 14001 (Environmental) and ensures our products and services are supplied safely, consistently and sustainably.



KEY FACTS

EWC codes:

16 06 01
16 06 04
20 01 33
20 01 34

Percentage we recycle:
100%

Relevant regulation:
Waste Batteries and Accumulators Regulations 2009

Average CO2e saving per tonne recycled:
-0.75 tonnes (Defra)

