Lead-Acid Battery Recycling

Lead-acid batteries are relatively simple electrochemical devices able to store electrical energy. Unlike common dry cell or alkaline batteries used in torches and other household appliances, lead-acid batteries may be recharged after the stored energy has been used. This is why they are widely used in motor vehicle starting engines and running appliances (e.g. air conditioning, headlights), and as backup energy storage devices (e.g. for solar panels).

Lead-acid batteries are made up of sheets of lead immersed in a ‘bath’ of sulfuric acid. Usually the whole assembly is contained in a robust plastic case made of polypropylene or polyethylene.

**Why recycle lead-acid batteries?**

Used lead-acid batteries are classified as hazardous waste under the *Hazardous Waste Act 1989* and should not be disposed of with the regular garbage. Each lead-acid battery contains about 2-3 litres of sulfuric acid, as well as lead, both of which are toxic. Lead is a cumulative poison in our bodies and is also harmful to the environment, particularly fish, animals and plants.

More than eighty thousand tonnes of lead-acid batteries are finished with each year. As hazardous waste, it is important these do not go to landfill.

Lead-acid batteries can be re-conditioned or recycled into new products. Recycling of these batteries uses less energy than refining primary ore and removes lead from the environment.

**How to recycle lead-acid batteries**

Used lead-acid batteries are valuable for their components. Almost all scrap metal merchants will accept used lead-acid batteries for recycling. A collection service is available at most
landfills, transfer stations, service stations and automotive workshops.

Many councils have regular collections or drop-off locations for hazardous waste. Visit your council pages on RecyclingNearYou.com.au to find out about hazardous waste services in your area.

What happens to the batteries?

Used lead-acid batteries can be re-conditioned. This process works very well and the lead plates are restored back to new battery standards.

Through the recycling process the various components of lead acid batteries are recoverable to 96%. The materials extracted are used in the remanufacturing of batteries and plastic moulding applications, whilst the acid is neutralised and discharged.

More information

Department of Sustainability, Environment, Water, Population & Communities, Hazardous Waste Section, Ph 1800 803 772

Business Recycling