

Disposal of Lead-Acid Batteries

The disposal of lead acid batteries in landfills and/or their incineration is prohibited. An owner or operator of a solid waste disposal facility other than a recognised transfer or reception facility should make provision for the recycling of used lead acid batteries.

A significant amount of lead-acid batteries can be found in all industrial and commercial business applications. The size of the battery can vary from completely filling a large room to a battery inside an Uninterruptible Power Supply (UPS) "protecting" a personal computer either in business or in the home. You need to be aware of the hazardous materials present in lead-acid batteries.

The active materials are lead and sulphuric acid and lead compounds formed through the charging and discharging of the battery. The sulphuric acid is the strongest when the battery is fully charged and may be as high as 40% pure sulphuric acid mixed with 60% water. When the battery is substantially discharged, both the positive and negative plates are converted to lead sulfate and the sulphuric acid is less than 10% sulphuric acid mixed with more than 90% pure water. Sulphuric acid, lead, lead dioxide, and lead sulfate are classified as Listed Wastes.

A Licensed waste contractor is required to handle "Listed Wastes" (see Schedule 2 of the Waste Management and Pollution Control Act). For details as to what comprises Listed Wastes see Schedule 2 of the Waste Management and Pollution Control (administration) Regulations. In all cases respective Material Safety Data Sheets for such compounds should be adhered to.

Normal operation during the useful life of the battery under normal conditions includes exposure to extremely hazardous substances and hazardous materials. Hydrogen gas may be released and accumulate to explosive levels. Lead sulfate accumulations are also typical and OH&S considerations should be taken into account, particularly where handling occurs. A lead acid battery should be discarded or disposed of only as follows:

A lead acid battery retailer or wholesaler should deliver a lead acid battery to any one of the following:

- A scrap metal dealer or secondary lead smelter.
- A battery manufacturer.
- A collection or recycling facility recognised by the Environment Protection Agency, Department of Natural Resources, Environment and the Arts.

A person other than a lead acid battery retailer or wholesaler should deliver a lead acid battery to any one of the following:

- A lead acid battery retailer or wholesaler.
- A scrap metal dealer or secondary lead smelter.
- A collection or recycling facility recognised by the Environment Protection Agency, Department of Natural Resources, Environment and the Arts