

# Batteries Storage and Disposal: Reference Guide

## Introduction

This guide provides practical advice on the safe storage, and disposal of batteries. It is intended for general awareness and is **not a substitute for formal training or site-specific procedures**.

## Batteries Storage

General Rules:

- Always purchase batteries from a reputable manufacturer or supplier. Cheap or counterfeit batteries may not undergo the same quality control processes and have a higher likelihood of failing.
- Do not place damaged batteries in regular battery recycling boxes.
- Cover exposed terminals to prevent short-circuiting.
- Ensure batteries are removed from devices and kept segregated before further material recovery.
- Store in Li-Po bags, UN-rated drums, or Bat-Safe boxes where applicable.

Rules for safe Storage:

- Do not mix different types of batteries or mix new and old ones together. The fire hazard increases significantly if the batteries are not properly segregated.
- Always label your storage containers.
- Lithium-ion cells should never be stored fully charged.
- Store in dust free and dry area and protect from moisture.
- Store in a temperature protected area between 10°C and 25°C. Protect from the frost, and temperatures above 60°C. Batteries should never be in the sun or on hot surfaces.
- Store in fire protected, separate areas. Do not store near any fire accelerating products.
- Drums must only be stored for a maximum of 6 months before disposal must be arranged.
- The drums must always be labelled, identifying the battery type, and waste battery owner/ producer.
- Use fire prohibiting materials such as Sand or vermiculite while storing batteries.

If your batteries are damaged in any way, you must place them in a fireproof battery bag prior to requesting collection. E&F do not supply these bags, but we will endeavour to return any bags collected.

Battery Type Guidance:

Battery Type	Disposal Method
Household (AA, AAA, etc.)	Place in designated battery recycling boxes. No attached wires.
Lead-Acid	Collect as WEEE. Cover terminals. If damaged, please place in a container to contain any leakage.

Battery Type	Disposal Method
NiCad / NiMH	Place in WEEE. Cover terminals.
Lithium (small, undamaged)	Discharge, if possible, cover terminals, place in Li-Po bag.
Lithium (damaged/swollen)	Do not place in WEEE. Store in Li-Po or Bat-Safe container. Arrange a Planon collection.

Note: The [Battery Recycling Boxes](#) around campus are designed to take any type of domestic style battery, they are not meant for any batteries with an attached wire connector.

## Batteries Disposal

### General Rules:

- Do not mix damaged batteries with undamaged batteries.
- Cover exposed terminals to prevent short-circuiting.
- Wear PPE including gloves, safety glasses and full overalls when handling batteries especially damaged batteries.
- Ensure batteries are removed from devices and kept segregated before further material recovery.

[Battery Recycling Boxes](#) are available in most buildings. If a box is not available, please send your batteries via the internal post to Waste and Recycling Team in Building 35. Boxes are available for public in the reception areas. To obtain a box a request should be made via Planon Self Service on SUSSED.

[Lead Acid](#) can be collected as WEEE, please ensure any terminals are covered before placing in the designated collection points for your Faculty Buildings. For Engineering Department, the WEEE cages are located at Highfield and Boldrewood Campus- please contact your Estates team. If the battery is damaged, depending on the damage it may be advisable to arrange a direct collection using Planon.

[NiCad & NiMH](#) batteries with or without attached wire connectors can also be placed in the WEEE, if there are any exposed terminals, please ensure these are covered. If the battery is damaged, depending on the damage it may be advisable to arrange a direct collection using Planon.

### Lithium batteries

1. If undamaged place small (see point 3) lithium batteries in the [Li-Po bag](#), if possible discharge the cells and ensure any exposed terminals are taped over.
2. If damaged/swollen, discharge if safe to do so and place lithium batteries in a Li-Po bag and arrange a collection via Planon (do not store these in the provided WEEE cages), any damaged batteries should be stored in a Li-Po bag or suitable container e.g. [Bat-Safe](#) whilst they await collection by E&F. Li-Po bags that E&F need to take away should be marked with the lab/user details so it can be returned.

3. For larger lithium batteries undamaged/damaged arrange a collection via Planon, ideally place any batteries in a Li-Po bag if possible. Some areas collect batteries- storing them in Bat-Safe boxes and then arrange a single collection via Planon, if this works for you then continue to do that.

## Emergency Procedures

This section covers emergency procedure regarding damaged or exploded battery including battery fires. It is intended for general awareness and is **not a substitute for formal training or site-specific procedures**.

### General Rules:

- In case of impact/ accident- even if there may be no visible damage, a delayed fire can occur hours or days after the impact/ accident. Where possible, it is safest to discharge the battery immediately.
- If the battery is hot and/or leaking or smoking, only separate the battery from other waste items if it is safe to do so. Do not handle a hot cell unless it reaches the room temperature or for atleast 24 hours.
- Do not touch any leaking material and immediately report it to your safety officer.
- Damaged Lead acid batteries must be stored and disposed of in a bunded container.
- In case of fuming or exploded cell, please evacuate the area and inform the Safety Officer, Health and Safety Cell.
- Immediately inform Fire Safety or Security if you suspect a potential Battery fire.
- In case of fire, activate the nearest fire alarm and ensure all personnel evacuate the area.
- By-products of combustion may be toxic when inhaled. In the event of heavy smoke, exit the area immediately. Ensure others have left the area and close doors behind you as you leave.
- Wear PPE including gloves, safety glasses and full overalls when handling batteries especially damaged batteries.

## Disposal Procedure

- Please download and fill in the consignment note a.k.a. MAQ form for our Hazardous Waste contractor. The MAQ form and instructions are available on the [Waste and Recycling](#) webpage.
- Please contact Waste and Environmental Services Manager at [o.martolia@soton.ac.uk](mailto:o.martolia@soton.ac.uk) to arrange a collection.

## Contacts and Resources

- For large volumes, hazardous waste pickups- contact Waste and Environmental Services Manager at [o.martolia@soton.ac.uk](mailto:o.martolia@soton.ac.uk).
- For damaged batteries, arrange a collection through Planon or Estates and Facilities helpdesk at [E\\_F\\_HELPDESK@soton.ac.uk](mailto:E_F_HELPDESK@soton.ac.uk).
- Consult your Safety Office or E&F team for expert advice.