

Health & Safety Alert

Topic: Lithium-Ion batteries

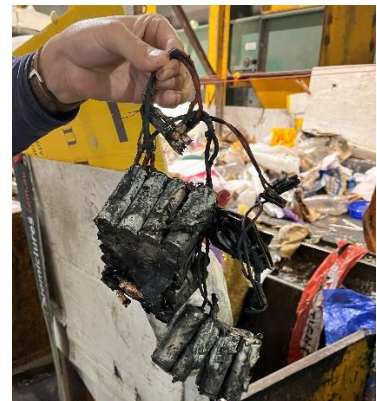
Site: Dandenong Materials Recovery Facility (MRF)
 Issued by: Gayle Seddon, Business Development Manager,
 Victoria.



Lithium-ion batteries and other hazardous goods such as gas bottles placed in council recycling bins are causing smouldering/fire related incidents in collection trucks and at Materials Recovery Facilities (MRF). These items pose a significant risk to health and safety of staff and plant operations. Prolonged exposure to fire can weaken machinery, cause delays in material processing and halt acceptance of council deliveries.

Two recent case studies are highlighted below:

Date	Incident description	Impact
25/08/23	12pm fire in Dandenong MRF infeed conveyor caused by lithium-ion battery pack.	Due to quick response of the operating team and fire brigade there was no major damage to plant.
	Battery pack thought to be from a mobile device such as a golf buggy.	Thankfully there were no human injuries. Acceptance of Council recyclables was halted for the day.
11/09/23	12pm fire in Dandenong MRF under eddy current area caused by lithium-ion battery pack.	Due to quick response of the operating team the fire was extinguished. Thankfully there were no human injuries. This caused a full stop in operations for the rest of the day for safety checks.



Whilst we have fire-fighting equipment, processes and procedures to reduce the risk and damage caused by fires, the risk created by batteries is an industry wide issue that requires improved education and controls of materials being placed in bins. We believe people want to do the right thing in recycling and to assist them, Council needs a clear and concise message about the safe disposal of batteries and other hazardous goods. The Yellow bin is not an option.

Action request: education, compliance and enforcement

1. Alert your communities to the health and safety fire risks to waste and recycling staff and facility operations due to incorrect disposal of batteries.
2. Alert your communities to the correct disposal venues for lithium-ion batteries including both loose and embedded e.g., vapes, battery packs in electrical equipment in your council area.
3. Alert your communities to the compliance and enforcement actions being taken by council to prevent hazardous goods being placed in waste and recycling bins.
4. Provide us with a link and copy of your education and communications collateral related to safe disposal of lithium-ion batteries to assist us with the development of a best practice guide to share with councils.
5. Participate in a workshop to develop a lithium-ion battery communications and education strategy and action plan.
6. Assist us with discussions with state government on preventative actions and a statewide education campaign on correct battery recycling and disposal.

Best Practice council communications strategies

- Rejecting batteries in recycling bin inspections and providing letters to residents if they are found in bins.
- If a collection vehicle fire occurs, letters are sent to households in the area.
- Promoting local battery drop off locations.
- Communications via all council channels, messaging on website and in waste and recycling guide.
- Partnering with nearby councils on local bus promotions.
- Working closely with collection and processing service providers.

Case Studies

Solo Resource Recovery have developed the following collateral for councils.

SAFELY RECYCLE TO PREVENT FIRES AND ENVIRONMENTAL HAZARDS

Your Batteries Need EXTRA CARE

Batteries of any size or form, **MUST NOT** be placed in your household recycling or garbage bins – as they are a **FIRE AND ENVIRONMENTAL HAZARD**.

More than 450 fires in Australia have been linked to lithium-ion batteries over the past 18 months!

Batteries need extra care, and safe recycling involves a little first-aid and taping up your batteries.

These steps will help you SAFELY RECYCLE YOUR BATTERIES:

- 1 TAPE** the terminals of used batteries to prevent sparking. Always use clear sticky tape.
- 2 STORE** used batteries in a clearly labelled glass or fire-resistant container for no longer than six months. Make sure the container is not airtight as pressure can build up.
- 3 DROP OFF** batteries at a Battery Recycling Location near you.

Keep this container in a cool, dry place, away from heat sources like stoves and out of reach of children and pets.

TWEED SHIRE Battery Recycling Locations

B-CYCLE BATTERY DROP OFF:

- IGA 11a Murwillumbah Street Murwillumbah
- WOOLWORTHS 39-45 Tweed Coast Road Cabelita Beach
- FOODWORKS 28-40 Overall Drive Pottsville
- WOOLWORTHS 22-26 Pearl Street Kingscliff
- ALDI TWEED MALL Cnr Wharf & Bay Streets Tweed Heads
- WOOLWORTHS TWEED MALL Cnr Wharf & Bay Streets Tweed Heads
- BIG W TWEED CITY 54 Mirjungal Drive Tweed Heads South
- WOOLWORTHS TWEED CITY 54 Mirjungal Drive Tweed Heads South
- ALDI 9-11 Machinery Drive Tweed Heads South
- TRADETOOLS 18 Machinery Drive Tweed Heads South
- BUNNINGS 23-41 GreenWay Drive Tweed Heads South

MOBILEMUSTER DROP OFF:

- OPTUS TWEED MALL Cnr Wharf & Bay Streets Tweed Heads
- OPTUS TWEED CITY 54 Mirjungal Drive Tweed Heads South
- TELSTRA TWEED CITY 54 Mirjungal Drive Tweed Heads South
- SALVO 284 Greenway Drive Tweed Heads
- HARVEY NORMAN 29 Greenway Drive Tweed Heads South
- BATTERY WORLD 4/77 Mirjungal Drive Tweed Heads South
- SALVO 102-106 Main Street Murwillumbah
- LEADING EDGE TELECOMS Sunnyside Mall Wollumbin Street Murwillumbah
- LEADING EDGE TELECOMS Sunnyside Mall Cnr Brisbane & Wollumbin Streets Murwillumbah

COMMUNITY RECYCLING CENTRES:

- TWEED SHIRE COUNCIL Civic & Cultural Centre 10-14 Tumbulgum Road Murwillumbah
- TWEED SHIRE COUNCIL Civic & Cultural Centre Cnr Street & Wharf Streets Tweed Heads
- STOTT'S CREEK RESOURCE RECOVERY CENTRE (THE TIP) Liddings Creek Road Stott's Creek Phone 01 6270 3400

COMMUNITY RECYCLING CENTRES accept multiple battery variations.

MOBILEMUSTER accepts all mobile phones, their batteries, and accessories.

B-CYCLE accepts rechargeable, household & button batteries, as well as removable batteries from power tools, digital cameras and e-bikes.

Logos: TWEED SHIRE COUNCIL, mobile muster, B-cycle Battery Recycling, Solo Resource Recovery

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- 2 STORE** used batteries in a clearly labelled glass or fire-resistant container for no longer than six months. Make sure the container is not airtight as pressure can build up.
- 3 DROP OFF** batteries to the local Community Recycling Centre or Tip, check with your Council for the closest location or at B-cycle and MobileMuster via their website.

Keep this container in a cool, dry place, away from heat sources like stoves and out of reach of children and pets.

Logos: B-cycle Battery Recycling, mobile muster, Solo Resource Recovery

SAFELY RECYCLE TO PREVENT FIRES AND ENVIRONMENTAL HAZARDS

Truck livery examples



Caption: L to R Mornington Peninsula Shire Councillors and Solo Resource Recovery Recycling truck "No batteries, No gas bottles, No flammable items" campaign, Whitehorse City Council "Don't bin your batteries" campaign.

Media articles

Fires caused by Lithium-ion batteries

"An average of three to four fires a week are being reported in NSW as a result of batteries in waste trucks, recycling centres, transfer stations, landfills and scrap metal yards.

Fire and Rescue NSW recorded 180 lithium-ion battery fires in 2022, up from just 16 in 2021, with related injuries also on the increase.

Lake Macquarie City Council, in the NSW Hunter region, has launched an education and awareness campaign and opened up free drop-off centres following a series of local and regional incidents, including a recent garbage truck fire caused by a laptop concealed in a cardboard box.

Batteries that end up in landfill are also causing fires and contaminating soil and waterways, Council says."

[Garbage truck battery fires drive council to action - Government News](#)

[Batteries not for bin warns Eurobodalla Council, fire extinguished at recycling centre | Bay Post-Moruya Examiner | Batemans Bay, NSW \(batemansbaypost.com.au\)](#)

[No excuses for not keeping batteries out of the main recycling stream | Riotact \(the-riotact.com\)](#)

[Battery sparks Benalla truck fire | Riverine Herald](#)

[Vape blamed for recycling truck fire - Waste Management Review](#)

[Dispose of batteries safely, urges Tesch - Central Coast News \(coastcommunitynews.com.au\)](#)

[New Plymouth District Council urges proper recycling of batteries - NZ Herald](#)

Innovation in Battery Recycling

[UNSW launches new ARC Microrecycling Hub for batteries, complex waste - Australian Manufacturing](#)