



Environment Protection Authority Victoria

15 July 2024

Evidence to the Public Accounts and Estimates Committee Parliamentary Inquiry into Vaping and Tobacco Controls



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Environmental impacts of battery waste from vapes

As Victoria's independent environmental regulator, EPA's role is to protect the environment and human health from the impacts of pollution and waste. It is important the environmental impacts from pollution and any mismanagement of vape and e-cigarette waste are considered when assessing their effects on the community.

Risks of harm from vapes

- Vapes include embedded lithium-ion batteries (LIBs) and are prone to improper disposal.
- Victoria has few disposal facilities that will accept vapes. Most vapes end up in general waste and recycling bins or are discarded as litter. In general, batteries only have a recovery rate of 10-12%.
- Once in bins, they enter the waste stream undetected and are not sorted, separated, handled or stored appropriately. Batteries commonly found in vapes can malfunction and ignite when damaged, crushed or compacted in trucks, or when improperly handled.
- When waste, vapes with LIBs pose multifaceted risks, encompassing fire hazards, environmental degradation, human health concerns, and economic impacts.

Fire risk

- Improperly disposed of vapes and LIBs have caused many fire incidents in Australia, including in trucks and at recycling facilities, endangering lives and causing significant pollution events to the air, waterways and land.
- In 2023, Victorian fire services were responding to at least one significant LIB-related fire each week, with ABC reporting more than 1,000 fire nationally in the last year. LIBs waste is growing 20% annually.

Economic impacts

- Dealing with these types of fires causes substantial financial losses for government, waste management facilities, transportation companies and affected communities. The battery fire at the recycling centre in Canberra in December 2022 cost more than \$50 million to rebuild.

Victoria's environment protection framework

In 2019, e-waste (including batteries) was banned from household waste and landfills. This is supported by the *Environment Protection Act 2017* and the *Environment Protection Regulations 2021* provide a robust framework for protecting human health and the environment from the harmful effects of pollution and waste.

General Environmental Duty

- The general environmental duty (GED) is central to our laws and requires all Victorians to manage risks to human health and the environment their activities create. Everyone must take reasonable steps to minimise their risks, so far as reasonably practicable, including the disposal and management of vape and cigarette waste. EPA supports individuals to comply with their GED obligations through engagement and awareness campaigns.

Waste regulations

- The Environment Protection Regulations classify vapes as a 'priority waste', which has more stringent regulatory obligations because it
 - is prone to mismanagement
 - is hazardous to human health or the environment
 - has potential for reuse or recycling opportunities.

Permissions

- Waste transporters, receivers and processors, including those recovering vapes and LIBS, require an EPA permission.
- EPA sets fire prevention and control measures in permission conditions – if not met, EPA can suspend or cancel the permission

EPA actions to reduce the risks from vape waste

EPA is coordinating its efforts and collaborating with other regulators and departments both in Victoria and across Australia and New Zealand to address the growing issue of vape waste. We have also increased our education campaign to the public through our social media channels to raise awareness and educate the community on how and where to dispose of e-waste, including used batteries.

Compliance and enforcement

- Between March 2023 – February 2024, EPA conducted over 350 inspections at recycling facilities. This resulted in 17 infringement notices, 109 remedial notices, 3 official warnings and 475 pieces of compliance advice.

Litter infringements

- EPA actively combats inappropriate vape disposal (e.g thrown out of car) through its litter reporting program, where members of the public can report littering and EPA issues infringement notices. Local councils also actively enforce litter laws.

Public awareness

- EPA provides information through its social media channels to raise awareness and educate the community on how and where to dispose of used batteries (i.e. not in general waste or recycling bins).

Industry guidance

- EPA has available several guidelines for industry on the management of e-waste including correct management, storage, reprocessing and hazard and risk management.
- EPA is leading the development of a national standard for the safe management and handling of end-of-life LIBs for the Heads of EPA Australia and New Zealand. This work will align with product stewardship initiatives and is strongly supported by Victorian fire agencies.

Working across government

Department of Energy, Environment and Climate Action (DEECA):

- DEECA is leading a cross-portfolio project with EPA, Sustainability Victoria and Recycling Victoria to work with other States to accelerate consideration of policy options for improving end-of-life management for batteries and products with embedded batteries (including vapes) including new stewardship schemes

Sustainability Victoria:

- Small Acts, Big Impact campaign focusses on taking batteries to drop off points for recycling and information for safe storage
- Detox your home program with more than 30 permanent drop off locations at council transfer stations and infrastructure upgrades for LIBs and alkaline batteries

Recycling Victoria:

- Consolidated review and stocktake of disposal network including drop off options for community
- Expanding collection networks through targeted funding of more drop off collection sites if gaps are identified in the network.

Therapeutic Goods Administration

- Advice on managing vapes seized by police operations and classification guidance on managing risks of the embedded batteries as well as pharmaceuticals (nicotine) relating to the disposal of seized vapes.

Fire services (Victoria and NSW) and Worksafe Victoria

- EPA, Worksafe and fire services have a standing joint oversight committee to support coordinated prevention and response to fire risk at high risk sites – this includes fire risk from batteries.
- Through the national guidance work with Heads of EPA, technical and risk management expertise is being shared across environment and fire agencies to consider evidence based preventative measures.

New directions in the national landscape

Ban on sale of vapes

- The Australian Government has introduced restrictions on the import and sale of vapes, including a ban on sales of vapes outside pharmacies from 1 July 2024.
- This is expected to significantly decrease the numbers of vapes in waste.

National stewardship scheme

- To respond to concerns that consumers find it difficult to dispose of LIBs and other batteries, the Environment Ministers are investigating options to expand current battery product stewardship schemes into a national mandatory extended producer scheme that includes embedded batteries.
- An expansion of disposal options is critical to reducing the risks from waste LIBs but will take some time to occur

Product and import standards

- Vapes provided by pharmacies will continue to pose risks once they enter the waste stream if consumers cannot easily separate the LIBs embedded inside them.
- EPA Victoria considers that improving manufacturing, import and labelling standards for LIBs is a critical part of reducing LIB related waste and fire risks – this type of product safety regulatory role is often led by the Australian Government.

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