

ERP Ireland Battery Barrel / Box / 20l Tube Risk Assessment

Assessment Reference No.	RA.ERP.231018 (ERP Ireland Battery & Vape Receptacle Risk Assessment)		
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RISK ASSESSMENT SUMMARY

Description: This Risk Assessment considers the hazards and risks involved with the collecting, handling and storage of waste portable batteries (and vaping devices including e-cigarettes containing batteries) currently accepted in battery boxes, tubes and barrels under the Waste Batteries and Accumulators Regulations 2009 in relation to a potentially full barrels, tubes or boxes of batteries that will be sent to a processor for recycling.

Location: Publicly accessible buildings; libraries, schools, leisure and community centres, council offices, retail shops, supermarkets, hospitals & health centres, office buildings etc.

Personnel at Risk: Customers, employees, public.

This Risk Assessment has been given a Risk Score of 9 (High)

RISK SCORE:

Description	RISK SCORE
Injuries due to lifting barrel / box / 20l tube incorrectly	High (9)
Minor/severe cuts from damaged batteries	Moderate (6)
Minor/severe burns hazardous materials leakage	Moderate (5)
Potential fire due to storing batteries incorrectly / incorrect types	Moderate (5)
Injuries due to assembling the box incorrectly	Acceptable (4)
Storing barrel/ box / 20l tube in an inappropriate location to prevent damage to the box	Acceptable (2)
Injuries due to storing batteries incorrectly	Acceptable (4)
Injuries due to storing Vapes incorrectly	Acceptable (4)
Storing barrel / box / 20l tube in an inappropriate location to prevent blockages/ ventilation (near a heat source)	Acceptable (1)

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Recommendations:

- ↑ Inform all personnel of the findings of the Risk Assessment
- ↑ Consider manual handling training for all those involved in handling battery boxes/tubes
- ↑ Consider basic training for all those involved as to the requirements of the battery box (Assembly, storage location, battery types, etc).
- ↑ Do not attempt to move barrel / 20l battery tubes - this should be done by ERP's designated collection drivers.

Risk Controls:

Hazard Description	Risk	Likelihood	Severity	Risk Factor	Control Measures identified.
Manual Handling – lifting the box or 20l tube or moving the barrel either up or down from the storage position	Strain / injury from careless handling of load	3	3	9	Manual Handling training for all end users who will be required to lift or move these boxes / 20l tubes. <u>Barrels should only be moved by ERP staff and its operators.</u>
Batteries falling out from the bottom of the box as it is lifted due to incorrect/poor assembly	Strain / injury from dropping of load. Batteries falling onto feet. Loose batteries on the floor could lead to potential slips and trips	2	2	4	End users to check that the boxes have been assembled correctly.
Base of box collapsing due to becoming wet from external fluid	Strain / injury from dropping of load. Batteries falling onto feet.	1	2	2	Ensure barrel/box/tubes are situated in a dry, convenient and accessible location away from damp or moisture, direct sunlight or any heat source.

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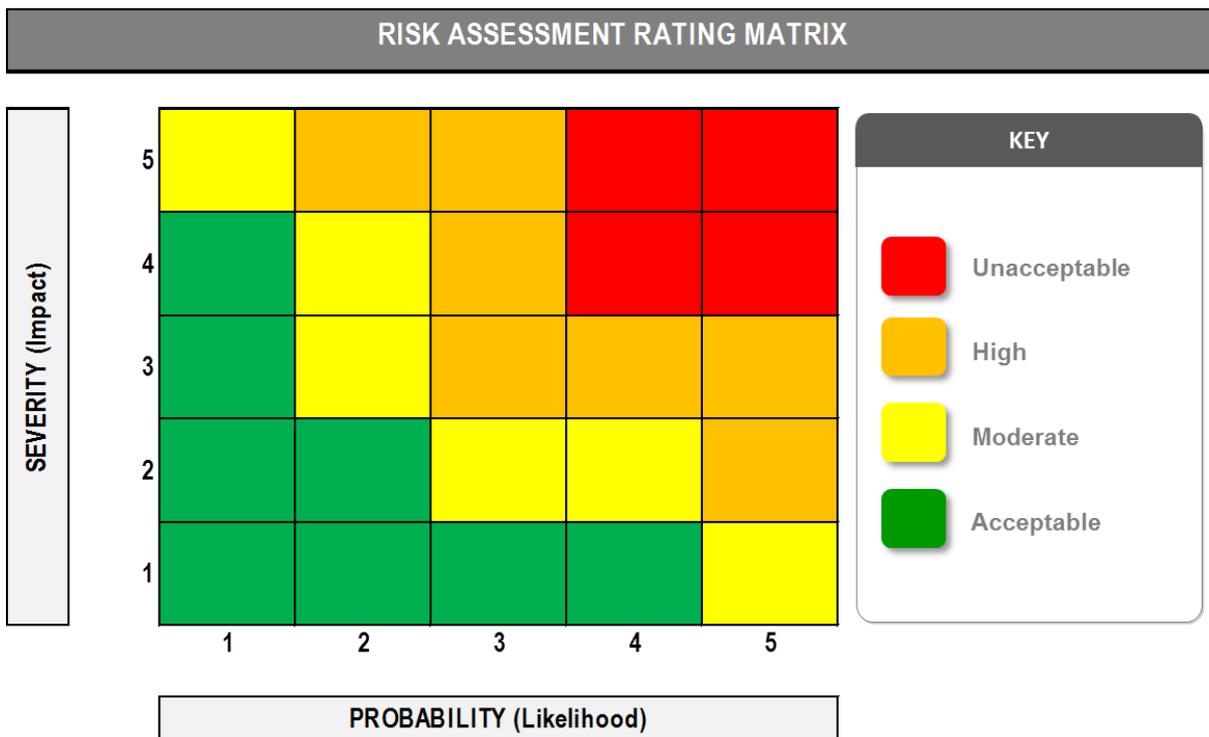
Hazard Description	Risk	Likelihood	Severity	Risk Factor	Control Measures identified.
The mixing of a full range of batteries including lithium has the potential for fire	Batteries could come into contact and potentially spark and start a fire.	1	5	5	<p>Barrels / Boxes / 20l tubes have a delivery slot that will only accept small domestic type batteries.</p> <p>Signage is very clear as to what type of battery can be placed into the box.</p> <p>Signage includes what type of batteries can be recycled, information clearly detailed on the barrel / box / 20l tube to ensure batteries are fully discharged (Where possible) and to keep the barrel/box /20l tube in a convenient and accessible location.</p> <p>Ensure there are no wires attached to any loose batteries.</p> <p>Ensure that lithium-ion batteries are fully discharged, and their terminals are taped over.</p>

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Hazard Description	Risk	Likelihood	Severity	Risk Factor	Control Measures identified.
Storage of the barrel / tube / box itself (ventilation/proximity to fire sensors and extinguishers)	Blockages to fire exits and extinguishers could cause panic and slips and trips in the case of a fire.	1	2	2	Information provided to ensure barrel/box /20l tube is situated in a dry, convenient and accessible location, and not blocking exits, fire sensors or extinguishers
Hazardous material spillage from leaking battery units.	Minor/severe burns from chemical spillage	1	5	5	Wear protective gloves when handling waste batteries.
Hazardous material spillage from vapes/liquid tanks.	Eye irritation, skin irritation, harmful/toxic if swallowed.	1	5	5	Wear protective gloves when handling waste vaping devices. If tank can be separated from device, ensure it is empty and dispose of tank separately in the appropriate way.
Sharp parts on batteries caused by damage	Cuts from damaged batteries	3	2	6	Wear protective gloves when handling waste batteries

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All ERP Ireland risk assessments are scored using the following scoring mechanism.



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Likelihood	Definition	Rating
Inevitable	If the work continues as it is, there is almost 100% certainty that an accident will happen, for example: <ul style="list-style-type: none"> ▪ A broken stair or broken rung on a ladder ▪ Bare, exposed electrical conductors. ▪ Unstable stacks of heavy boxes 	5
Highly Likely	Will happen more often than not. Additional factors could precipitate an incident, but it is still likely to happen without this additional factor.	4
Possible	The accident may occur if additional factors precipitate it, but it is unlikely to happen without them.	3
Unlikely	This incident or illness might occur, but the probability is low and the risk minimal.	2
Remote possibility	There is really no risk present. Only under freak conditions could there be any possibility of an accident or illness. All reasonable precautions have been taken - This should be the normal state of the workplace.	1

Severity	Definition	Rating
Very High	Causing multiple deaths and widespread destruction e.g. fire/ building collapse.	5
High	Causing death, serious injury or permanent disability to an individual.	4
Moderate	Temporary disability causing injury or disease capable of <u>keeping an individual off work for three days or more</u> and reportable under The Safety, Health and Welfare at Work (Reporting of Accidents and Dangerous Occurrences) Regulations 2016 (S.I.No.370 of 2016).	3
Slight	Minor injury, which would allow the individual to continue work after first aid treatment on site or at a local surgery. The duration of the stoppage or treatment is such that the normal flow of work is not seriously interrupted.	2
Nil	Very minor injury, bruise, graze, no risk of disease.	1

Disclaimer

To the extent permitted by applicable law we hereby exclude liability for loss or damage, whether in contract, tort (including negligence), breach of statutory duty or otherwise, even if foreseeable, arising under or in connection with your use of the ERP battery collection and recycling service, including in each case for any (i) direct loss or damage; (ii) indirect or consequential loss or damage; (iii) loss of income or revenue; (iv) loss of business; (v) loss of profits or contracts; (vi) loss of anticipated savings; (vii) loss or corruption of data; and/or (viii) loss of goodwill.

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