

SAFETY ALERT



IR3 Dangerous Occurrence Generator Battery Disintegration

Document No: PS-HSQE-SA-77

Revision: 2.0

Approved By: Maura Kilcommons

1. What Happened?

While conducting the routine weekly test of the backup generator, a sudden loud bang emanated from the generator when the changeover switch was activated within the control room. Upon inspection, the operative discovered that the battery had shattered and disintegrated. The operative promptly ensured safety of the site, confirming there was no risk of fire, and immediately notified their manager.

It is noteworthy to mention that a similar occurrence previously took place at another UÉ site while undertaking similar checks.

The battery type in both incidents is an older type of battery that is constantly fed by a trickle charger. This can lead to the battery drying out of the cell, generating heat and resulting in battery failure causing the battery to shatter and disintegrate. With newer generators the batteries are fitted with an automatic cut-off which eliminates battery dry-out and battery failure.



Incident 1. image



Incident 2. images



Point of failure can be seen on top of the battery.

2. Immediate Actions

- Uisce Éireann requested an incident report and service inspection be completed on the generator by the Water Service area approved generator service contractor.
- The generator battery has been replaced.
- Generator service technician to investigate if trickle charger is causing damage to generator battery.

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3. Further Actions

- Ensure routine visual inspections are undertaken, in line with the manufacturer's specifications, to check for signs of damage, corrosion, or leakage.
- Ensure a regular inspection and maintenance schedule is implemented in accordance with the recommendations provided by the manufacturer and/or supplier, including changing out the battery where it is at the end of its recommended lifespan.
- Ensure correct charging procedures are followed to prevent issues arising from either overcharging or undercharging the batteries.
- Ensure that operators understand the safe use and maintenance of the generator and its components, including the batteries.

4. Further Information

Please refer any queries to hsqe@water.ie or directly to your Uisce Éireann H&S support team.

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5. Distribution list

Internal		
All UÉ Staff <input type="checkbox"/>	Asset Operations <input checked="" type="checkbox"/>	Infrastructure Delivery <input checked="" type="checkbox"/>
Asset Management <input checked="" type="checkbox"/>	Fleet & Facilities <input checked="" type="checkbox"/>	Scientific & Technical Services <input type="checkbox"/>
Other Please Specify _____		

External		
Local Authority <input checked="" type="checkbox"/>	DBO <input checked="" type="checkbox"/>	Resident Engineers <input checked="" type="checkbox"/>
3 rd Party Inspectors <input checked="" type="checkbox"/>	3 rd Party Contractor: Infrastructure Delivery <input checked="" type="checkbox"/> Operations <input checked="" type="checkbox"/> Facilities <input checked="" type="checkbox"/>	
Other Please Specify _____		