

OHS ALERT



Incident /Hazard	Battery Vapour Ignition
	Occurred at Another Organisation
Injuries	None Reported

What happened?

A lead-acid battery connected to the fire-fighting pump switchboard in a terminal ignited, resulting in a detached plastic cover and splashed acid. The control for the battery only involved a voltage check of the battery, which was done prior to the incident. At the same time, two workers were in the fire fighting room working with a jockey pump, with a valid PTW document, a few meters away from the battery. They were using a grinder machine to cut a stuck bolt of the jockey pump. No one was injured in the incident.

Why it happened?

The vapour, which was generated by battery charging, ignited due to a build up of hydrogen vapour and then a spark caused by the grinder machine.

The people involved were not aware of the risks associated with hydrogen vapour generated by the battery, combined with a spark.

Actions for your work unit

- Charging of “wet” battery produces flammable vapour (hydrogen), and should be conducted in hazardous area classification and in well ventilated area away of sources of ignition.
- PTW should review all terminal operations during the time of activity, not in isolation.
- Maintain clear instructions to charge, discharge and operate the batteries in your terminal. Evaluate if changing the battery to a “dry battery” could solve the problem.
- Refer to DEP 33.64.10.10-Gen (Section 4.4.4 Batteries) for further guidance.

