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.