# Safety Alert

Safety, health and wellbeing: It's part of our Blueprint



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## Flooded Electrical Equipment

### The Incident

A basement had flooded overnight at a WTW due to a burst water pipe. When the operator went to investigate a comms issue, the water level was about 200mm and had covered the bottom of a live electrical control panel. The panel fed several chemical dosing pumps that had stopped operating and needed to be set in 'manual mode' to continue dosing. The operator entered the water to reset the pumps without realising the potential danger.

### **Conclusion**

Electrical equipment, unless it has been designed to operate underwater, has the potential to become extremely dangerous if it is operated either while being submerged or, unless proven to be safe by an Electrical Authorised Person, once the water has receded.



### Recommendations

All persons are reminded that where electrical equipment (not designed to operate underwater) are submerged, or have been submerged in water:

- NON-ELECTRICAL PERSONNEL DO NOT APPROACH OR ATTEMPT TO OPERATE OR ACTIVATE ANY CONTROLS UNTIL THE EQUIPMENT IS PROVEN SAFE.
- Once submerged electrical equipment has been observed, an Electrical Authorised Person shall be called out immediately to isolate and lock-off the submerged equipment from a safe location.
- Once the water has receded, an Electrical Authorised Person shall inspect and test the electrical equipment before the equipment can be returned back to service.

Safe Working Procedure SWP 056 details the approach to be taken for dealing with Submerged Electrical Equipment.



