

Safety at flooded roadside electrical equipment **SafetyAlert**

March 2014

Work activity description:

With the recent severe weather and subsequent flooding there could be a possibility of injury to people or animals if they come into contact with roadside equipment (or nearby floodwater) which may have developed an electrical fault because of water damage.

Approaching such equipment should be considered **high risk** as there is risk to life.

Investigation/findings:

This risk is present both when electrical cabinets are and have been underwater. The water itself can be acting as a conductor and there is no guarantee that all protective devices have activated. If unsure or if you find yourself faced with this situation expert advice should be sought before taking further action.

Carry out the five steps to Risk Assessment (HSE INDG163 (Rev 3) 06/11).

Any road worker or engineer working on the network could be at risk if they come into contact with equipment that has itself been in contact with floodwater. Any subsequent action should be carefully considered.

Before works are undertaken a site specific risk assessment must be carried out that includes controls for flooded equipment.

The floodwater is probably contaminated, so there are other health risks such as Leptospirosis.

If in doubt DO NOT approach submerged equipment or touch any equipment which may have been affected by floodwater. Seek professional advice first.

Further information:

For more information about this incident please contact Simon Langley, Traffic Technology Engineer on 0117 3728251 or email simon.langley@highways.gsi.gov.uk

For further information please call

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Actions:

When planning works on electrical equipment please consider:

- Has the electrical cabinet been underwater?
- Is there pooled water around the base of the cabinet?
- Could water have risen above the switchgear?

Switchgear may be installed with an IP rated enclosure, but not to the appropriate rating for being submerged.

- Consider cordoning the area off
- Check with your local electricity DNO about switch off or shut down

Recommendations once the flooding has subsided:

- Electrical testing should be carried out on the effected circuits, and recertified if necessary
- Equipment that has been submerged should be replaced
- Any removed equipment should be safely rendered unusable so it cannot be inadvertently re-used. All removed equipment should be marked as U/S ideally as it is removed, but definitely before it taken from site to avoid being mixed with new equipment

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