

<b>ALERT TOPIC</b>	Electrical Short Circuit	<b>ALERT REFERENCE:</b>	CRL 211122
<b>TARGET AUDIENCE:</b>	Regional Managers, Site Managers Site Engineers and Supervisors Other interested people	<b>AUTHORISED BY:</b>	N Roper
<b>DATE OF ISSUE:</b>	Monday 21 November 2022	<b>DISPLAY UNTIL:</b>	Mar 2023

### INTRODUCTION

Two employees recently received very minor 30 milliamp ‘shocks’ resulting from electrical short circuits after the electrical system came in contact with water. The individuals only received a very minor ‘shock’ as the electrical systems were both properly protected. If the electrical systems were not protected, they could have received much greater, prolonged shocks.

The first incident involved a (possible) earth fault on a domestic lighting circuit caused by rain ingress.

The second incident occurred during wet coring when the drill’s electrical systems came in contact with run-off water.



### REASON FOR ISSUING THIS ALERT

To remind people that electrical systems need to be properly installed, maintained, tested and certificated so that residual current devices etc will protect individuals so that they receive no more than a minor ‘shock’

### CONCLUSIONS AND DISCUSSION POINTS

1. All electrical equipment must be protected from physical damage and contact with water.
2. RCD devices are designed to trip below 30 milliamps which is below the level that can cause harm.
3. Immediately report any suspected faults or damage.
4. These incidents prove that electrical short circuits can occur, however a properly installed and maintained system will protect individuals. The individuals received very minor shocks similar to a static shock and remained unharmed.

## SHEQ ALERT

Please review the content of the attached SHEQ Alert for relevance prior to communicating the contents to your site teams. Please record this review on the form below and retain in the CRL filing system:

### SHEQ ALERT BRIEFING RECORD

<b>ALERT TOPIC:</b>	Electrical Short Circuit	<b>ALERT REFERENCE:</b>	CRL 211122
<b>PROJECT NAME:</b>		<b>DATE OF BRIEFING:</b>	
<b>BRIEFING DELIVERED BY:</b>			

The following people have signed to confirm receipt and understanding of this SHEQ Alert:

NAME	EMPLOYER	EMPLOYEE ID	SIGNATURE

*If you have any SHEQ issues that you wish to discuss, please contact your supervisor, line manager, or a member of the SHEQ team.*