

Electrical Cabinet Access

CAMs # 390536

1. Relevance

This alert is important for all staff who work in or with our [electrical businesses, workshops, quarries, bitumen and emulsion plants and asphalt plants](#). A copy should also be given to our electrical subcontractors.

2. Incident

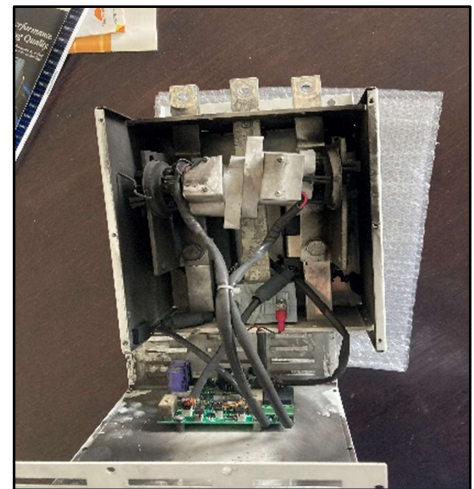
A quarry plant operator entered a main switch room to discover why a conveyor had stopped working. He's opened the electrical cabinet which contained the conveyor variable speed drive (VSD) to inspect the drive operation.

The electrical cabinet had been identified as "Restricted Entry, Licenced Electrician Only, ARC Rated PPE CAT 4 Required".

The operator has turned the cone crusher main switch off and opened the conveyor VSD cabinet door. He's then checked the VSD, reclosed the cabinet door and turned the cone crusher main switch back on.

The already running cone crusher starter (which was in an adjacent cabinet) has attempted to restart and [the sudden inrush of electrical energy has destroyed the starter in a large explosion](#).

The operator was very lucky not to be seriously injured in the explosion. [An arc flash electrical explosion has the potential to kill you or cause life changing injuries](#).



Cone Crusher Starter – Following Explosion

3. Contributing Factors

The plant operator had access to the electrical cabinets and chose to investigate the reason for the stoppage before calling the electrician.

The operator had seen the Arc Flash warning stickers [but did not respect the warning or appreciate the danger](#) present in an energised electrical cabinet.

The control system for the cone crusher did not sense that the supply power had been turned off and remained running.

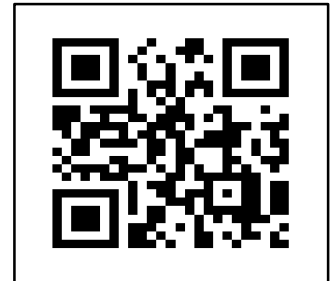


Electrical Cabinet Warning Sticker

4. Mandatory Requirements

Please make sure that:

1. A warning sticker is attached to all electrical cabinets before 22 December 2023 clearly identifying:
 - a) “Authorised Person Access Only” (or)
 - b) “Restricted Entry Licenced Electrician Only”
 - c) The correct Arc Flash CAT rating. NB: This will need to be confirmed by your electrician.
2. Before 30 September 2023 All “Electrician Only” restricted cabinets must be locked or screwed closed and require the use of a tool or key to open them. Keys must be stored securely.
3. Hold a toolbox meeting with all staff that might access cabinets and review the Electrical Cabinet Access poster to ensure everyone understands our minimum requirements before 31 October 2023.
4. Email this QR code, to our electrical contractors and explain that this gives them access to our Electrical Contracting Manual and Arc Flash Minimum PPE Requirements Poster. Ask them to please make themselves familiar with these documents. (Before 31 October 2023 please).
5. Identify any “Electrician Only” electrical cabinets which have historically been accessed by operational staff. Work with your electrician to determine whether the cabinet can be isolated before staff access it. If it can be isolated implement a “Lock Out Tag Out” procedure so that all power will be isolated from the electrical cabinet before it is accessed. (22 December 2023).
6. If isolation of the “Electrician Only” cabinet is not possible arrange for your electrician to relocate the electrical reset or plant control to the outside of the cabinet. This will eliminate the need for staff to access an energised electrical cabinet. (22 December 2023).



5. Revision History

Date	Author	Brief Description of Change
15/08/2023	M Pointon	1 st Draft
04/09/2023	T Talbot	2 nd Draft

6. Closeout Requirements

Please discuss this Red Alert with your teams, complete the items below and return to your Safety Manager. They will collate all responses for the business unit and send a single confirmation to the HSQES Analyst at nzincident@fultonhogan.com before 22nd December 2023

6.1. What date was this Red Alert communicated to the workplace: ____ / ____ /20 ____

6.2. Could this incident occur in your Region/Project? (Circle your answer below)

YES If Yes, please answer questions 5.3 & 5.4
NO If No, please answer question 5.5

6.3. Have all the actions and recommendations been implemented? (Circle your answer below)

YES If Yes, please answer question 5.4
NO If No, please answer question 5.5

6.4. Are these measures sufficient to eliminate or reduce the risk of an incident (or similar) described in the alert from happening again? (Circle your answer below)

YES or No

If No, please raise a CAM's case listing the required actions and accountabilities to be taken in order to eliminate or reduce the risk. Record the CAM's number below:

CAMs Case Number: CAMs- _____

6.5. Please note the reasons why this incident could not occur within your region / project?

In signing this document, I confirm that the actions above have been completed in this region/project.

Region / Project: _____

Region / Project Manager Name: _____

Signature: _____ Date: _____