Safety Advice 03-2013(a) (Apr)(NZ)

This supplement to the April Safety Advice 03-2013 is an update on developments since the original water blast penetration injury which occurred in the course of tower preparation for painting.

Original Safety Advice 03-2013 outlined an incident in which a tower painter employee suffered an abrasive blasting injury when water with abrasive medium blast-penetrated Kevlar protective trousers. The employer subsequently upgraded Kevlar protective trousers to incorporate all-round lower leg protection, and the PPE suite incorporated Kevlar arm and foot protective wear.

A wider assessment and trials of tools and water blasting methods was also undertaken, as indicated in the following extract from the Transpower "Gridlines" publication. This extract is inserted within this Safety Advice for information to the wider electricity industry.

"Transpower has carried out trials on an Air Assisted Water Blasting system as a possible replacement to the currently used 5000psi Wet Abrasive Water Blasting Units. Abrasive blasting plays a vital role in preparing tower steel surfaces prior to the application of a undercoat and top coat of paint. Unfortunately the 5000psi Wet Abrasive Water Blasting units, when used incorrectly, have caused a number of severe injuries and a fatality while being used in the Transpower tower painting activity.

Part of the trialling process saw Four TORBO Air Assisted Water Blasting Units purchased from an Australian agent to compare their performance against the current 5000psi Wet Abrasive Water Blasting units. The key areas measured were safety, performance, operational costs and user benefits. In the trial the TORBO Air Assisted Water Blasting Unit proved to be very effective in all aspects of their operation. The most attractive feature of the Air Assisted Water Blasting systems is it's safety aspect where injuries, through an inadvertent contact with the operators body, is proven to be less severe than that of the 5000psi Wet Abrasive Water Blasting system. This is mainly because of a lower nozzle pressure of 90 – 120psi compared to 5000psi and the suspended action of the garnet in the water.

The initiative to trial an alternative preparation method came from one of our Painting Support Engineers Phil Dravistski of Inspection & Consultancy Services Ltd, who has been instrumental in driving the initiative to a point where a fully equipped Mitsubishi Canter truck is being fitted out with two blast units and a compressor unit as part of the trial process.

For further information on the TORBO unit and its trial results contact David McDermott (021 310 745).”

Please read the above supplementary advice in conjunction with the original Safety Advice 03-2013, and for any further questions on corrective PPE actions by the employer, contact Mick Andrews at TBS Farnsworth on 0274 986 226 .

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