Lessons Learnt from a Significant Event



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Title: Bermondsey Dive Under Project, Severe Burns – 21st November 2012

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Picture(s)

Photographs show the burn injury to the operative's leg as well as the condition of the PPE after the accident







Overview of Event

An operative sustained serious burns to his leg and hand which required skin grafts.

The operative had been horizontally cutting off 32mm vertical reinforcement bars that were protruding from recently constructed piles using a petrol driven Stihl saw.

As the operative was cutting through one of the bars, he was unaware that he was being doused with fuel that was escaping from the petrol filler cap.

Sparks generated from the cutting, ignited the petrol, which in turn set fire to his hi-visibility trousers and vest.

* The IP was wearing standard issue trousers which are nylon. The Stihl saw manual recommends when cutting steel that flame retardant materials should be worn. The fact that an accelerant was involved may not have prevented the injury however this highlights the need to review user manuals for specific instructions.

Underlying Causes:

There are a number of underlying facts that contributed to the accident: -

- No task briefing had been provided for the task and a risk assessment was not in place
- No user manuals for Stihl Saws had been provided by the plant hire company
- Whilst training demonstrates use of these tools in a vertical position to ensure a 90 degree cutting angle, it appears to be common practice to use these tools to cut back rebar and other activities with the blade in the horizontal position
- Abrasive wheel training relied upon for the competence of the individual did not cover the use of this type of saw therefore provision of manuals and inclusion of controls in the risk assessment / task briefings was crucial

Key Message:

- Consideration for alternative methods of cutting such as hydraulic cutting for the removal of vertically protruding reinforcement bars from piles
- Pre-use checks should be undertaken on machinery and tools in order to establish they are fit for purpose
- Plant / equipment suppliers should provide manuals for equipment provided
- Manuals should be used to inform the risk assessment / task briefing
- PPE selected should be appropriate for the task
- No works should be permitted without a task briefing having been undertaken