Hydraulic Breaker Incident

WHAT HAPPENED

A sub contractor employee sustained a double fracture and crush injuries to his left forearm as a result of trapping his arm between a hydraulic breaker and the boom of a 360 degree excavator. The Injured Party (IP) and a colleague were assisting the excavator operator to change the ditching bucket attachment for the hydraulic breaker on the 8 tonne excavator. The two men were stood either side of the excavator boom holding the hydraulic hoses clear of the quick hitch attachment, as the operator attached the front 'bar' of the breaker to the quick hitch socket on the excavator. The breaker was then lifted to allow the 'rear bar' connection to be made. As the boom of the excavator was being manoeuvred into position, the IP put his arm across the boom and attempted to connect the breakers hydraulic hose to the connections on the boom, when the breaker fell forward trapping his arm between the breaker and the boom. • All involved in the incident failed to ensure that the machine was isolated, which resulted in the two pedestrians placing themselves in an unsafe position. • The operators' manual and the training delivered to excavator operators clearly states that the changing of attachments is the machine operators' responsibility. This was furthered confirmed during the investigation, when talking to other machine operators. • The operating procedure for engaging and releasing the

mechanical quick hitch clearly states that the operator should ‘keep bystanders away when engaging or releasing attachments’. • Other excavator operators have confirmed that they undertake the changing of attachments themselves as it is safer and easier. This ensures that the machine is isolated and that all stored energy in the hydraulic system is released, making the hose connection significantly easier. • The quick hitch was found to be in good working order at the time of the investigation so it must be concluded that the operator failed to connect the quick hitch to the attachment correctly. • A near hit occurred earlier in the shift with the same team of men. The breaker dropped to the floor from the bucket of a 6 tonne excavator, due to the quick hitch not being correctly attached. This was not reported at the time and only came to light during the investigation process. • The sub contractors Safe System of Work / Safe Operating Procedures (SSoW / SOPs) did not detail the process for the changing of attachments using the quick hitch and attaching the hydraulic hoses.



Trap Point

LEARNING POINTS / ACTIONS TAKEN

Company site managers/supervisors must: • Ensure that the contents of this alert is discussed will all site personnel and supply chain partners. • Ensure that

operators of plant fitted with quick hitch devices are reminded of their duties in relation to changing over attachments, ensuring that the machine is isolated and all stored energy released before commencing the operation. • Remind everyone of the importance of reporting near hits, as this may prevent a more serious incident occurring at a later date. • Ensure that incidents are appropriately investigated and learns disseminated. • Ensure that the Company 5m plant and vehicle exclusion safety zones are reiterated to everyone on site. • Review SSoW / SOPs to ensure that the use of the quick hitch is clear and prohibits anyone from placing themselves in the exclusion safety zones. The Operations Manager must ensure that this incident is highlighted and discussed with supply chain partners, and that they ensure their SSoW/SOPs adequately address this type of activity. (Safequarry Editors Note: A Best Practice Guide on the Safe Use of Quick Hitches on Excavators can be downloaded free of charge from the Construction Plant-hire Association website http://www.cpa.uk.net/sfpsgpublications/#QuickHitches)

LOCATION:	**ON-HIGHWAY**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**MANUAL HANDLING AND STORAGE**	**DATE ISSUED:**	**24/03/2015 15:32:53**
SUB ACTIVITY:	**AGGREGATES**	**INCIDENT No:**	**01410**