



## Title description: Reportable injury – Contact with hydraulic arm of HIAB

**A site operative (IP) sustained a cracked bone, flattened at the top, in Left Wrist – Injury sustained on Fri 10 Apr 15**

### What happened:

- A vehicle fitted with a lorry mounted crane (HIAB) was being used to remove a Trench Box (TB) from an excavation in the verge work area.
- As the hydraulic arm of the HIAB was being moved into position, directly above the set of 4 leg chains fitted to the TB, in error, IP put his Left Arm and Hand into the path of the hydraulic arm prior to it coming to a stop (halt).
- The end of the box section of the hydraulic arm tapped IP on the top of his Left Wrist resulting in injury.
- Photos (see right) – show a re-enactment by colleagues (not at the incident location), to demonstrate the position of the injured persons Left Hand and Arm, in relation to top strut of the trench box and jib of the hydraulic arm of the HIAB

### Investigation recognised the following:

- HIAB vehicle operator and IP were working as a team of 2 carrying out works at a number of site locations as per a SSOW
- IP was employed as a loading hand or 2<sup>nd</sup> man, providing assistance to the HIAB operator
- IP had not received formal training as a Slinger/Signaller, and was not there to carry out those duties. Instead, a trained Slinger/Signaller is assigned to each work team.
- In his eagerness to assist the HIAB operator, IP had put his Left Hand and Arm into a place of danger, over the top strut between the 2 Trench box panels before the hydraulic arm of the HIAB vehicle had come to a halt.
- The speed of this unexpected action by IP caught the HIAB operator by surprise. A consequence of which was the crane hook effectively punched the top of IP's Left Wrist (beneath position of a wrist watch), before the HIAB operator could react, by stopping the operation/ retracting the hydraulic arm.
- A poor perception of hazards/risks by IP attributed to no formal training in Slinger/Signaller duties

Re-enactment photo 1 –



Where IP was stood in relation to the Trench Box at the time of injury

Re-enactment photo 2 –



Position of IP's Left Hand and Arm, and part of the jib (coloured red) that made contact with IP's Wrist (coloured blue)

### Lessons learned

To reinforce the protocols of:

- **Assigning** - a trained Slinger/Signaller with each HIAB operator (mechanical lifting / lowering operation)
- **Hold point** - Safe system of work (SSOW) documentation in place for mechanical lifting and lowering using mobile plant equipment to include a "hold point" prohibiting works unless a trained Slinger/Signaller is in place
- **SSOW to include** - controls to prevent mistaken and unauthorised access into work areas when mechanical lifting and lowering operations are being prepared and undertaken
- **Trained Slinger/Signallers** - must be fully briefed on SSOW in place for each task prior to commencement of mechanical lifting / lowering, with briefings delivered by personnel, who supervise the works to be carried out