

# ◀ HEALTH & SAFETY ALERT ▶



## Crawler Crane Auxiliary Jib Chain Detachment – Update

### What happened?

An incident occurred on the 30<sup>th</sup> August '14 at Crossrail Moorgate site involving a crawler crane, where an over hoist cut out chain became entangled in the sheave, causing both chain and block to fall free. No one was injured as a result of this incident.

Following this incident, a mock-up was set up in a safe environment on the 15<sup>th</sup> September '14. The purpose was to replicate the working conditions and load of the crane, which involved lifting a half loaded 12t muck skip on the single rope auxiliary line.

As the speed of the hoist increased, it was observed that the over hoist block started to rotate. After several lifts, this rotation became sufficient to allow the chain to become entangled around the wire rope and the cut out block weight, to a point where it subsequently struck and damaged the sheave.

During this process, the over hoist chain remained taut, meaning the cut out switch was not activated and the crane continued to lift.

As soon as the line was lowered, the entanglement of the block and chain became released, causing the chain to snap, resulting in both block and chain to fall down the rope striking the auxiliary hook block. The trial effectively created an identical outcome to the incident which occurred on the 30<sup>th</sup> August '14.

A representative of the crane manufacturer was in attendance during the trial and is currently looking into permanent solution that may be applied to eliminate this risk.



### Recommendations:

**In advance of this solution and with immediate effect, Crossrail recommend that all contractors review the use single rope auxiliary lines until they get confirmation from their crane supplier / hirer that the configuration is safe and fit for use.**

**We request PC Project Manager to confirm to the CRL Project Manager by the 24<sup>th</sup> September '14 that the supplier / hirer has approved the crane set up and configuration as safe and fit for use.**