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Issued By: Thameslink Programme, HSEA Team, James Forbes House, 27 Great Suffolk Street, London SE1 0NS

Issue Number: TLP 024

Title: London Bridge – Excavator Arm struck Boat Skip (16th October 2014)

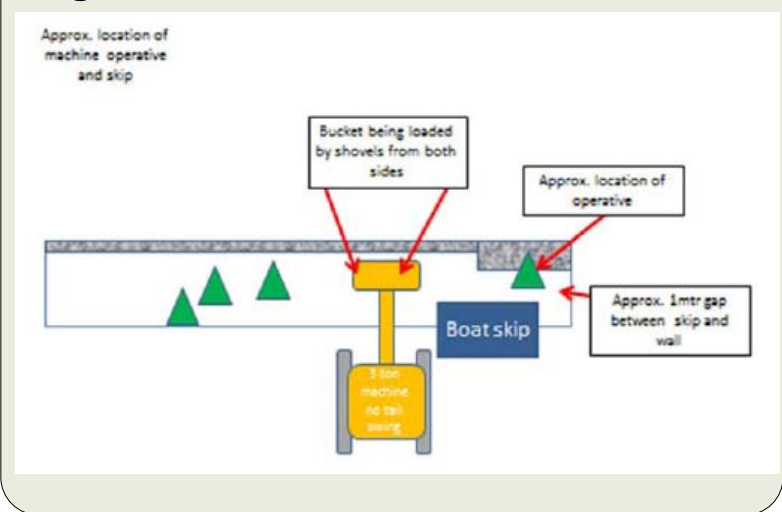
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Overview of Event:

A quality issue was identified from a previous concrete pour resulting in a team being required to break out the concrete and clear it away. A team of 4 operatives and a supervisor were assembled with tools and equipment. The concrete was broken out using air breakers. The clear away process was to use an excavator with bucket to scrape the rubble and place in a boat skip. The remaining rubble would then be shovelled in to the excavator bucket by hand and again placed in the skip.

During the operation the excavator driver lifted and moved his bucket which then struck the boat skip, the skip jolted forward and struck an operatives leg.

Diagram/Photo of event:



Underlying Causes:

- The driver failed to lift the bucket to a height which would clear the skip.
- The IP's position of safety was breached when the boat skip was hit by the excavator bucket - the configuration of the working environment was a contributory factor & specifically the position of the skip & its proximity to the wall
- The task was inadequately planned and change management was not properly addressed.
- The TBS was incomplete and did not cover the task adequately including positions of safety.
- The Supervisor for the works was undertaking two roles as he was also acting as banksman.

Actions Taken As a Result of Investigation:

- A safety briefing took place for machine drivers, Banksman and Slinger / Signallers. Hazards and risks of working in close proximity to plant and machinery were covered, particular emphasis was made to blind spots where visual contact between driver and operative can in cases be challenging.
- Where a significant change in work method occurs the task must cease and re-planned. The Engineers will need to take full account of introducing heavy plant and machinery which will mean adapting and re-authorising by a Senior Engineer and briefing to Supervisors.
- All Supervisors & Works Manager were re-briefed on the fair and just culture as the machine operator was dismissed from site prior to the investigation being undertaken.
- A new system for pedestrian / operative detection is to be trialled at London Bridge. The Blaxtair is a visual & audible detection system which alerts the Driver of plant to anyone who enters or remains in a danger zone. The technology can differentiate between objects and people. Details can be found here <http://www.arcure.net/en>
- Machine drivers will undertake an initial assessment when joining the project to confirm competency, aptitude and ability to work under instruction to Costain standards.
- The issue of performing two different job roles at the same time will be shared throughout the project, emphasis will be made to stop works immediately should anyone be asked to perform dual roles in relation to safety.

General Key Messages:

- Exclusion zones should be in place to prevent people and plant coming into contact during operations (only essential people required in the exclusion zone).
- What are the specific arrangements for controlling movements of machines and in particular location of the position of safety during these operations.
- Clear communication arrangements should be in place between operators, banksmen, Slinger / signallers, machine controllers and any other persons involved in the activities.
- Consider how and what is briefed to the working party to make sure a clear understanding is reached.