

Arm trapped following uncontrolled movement of an outrigger

Description

The IP was working with a drilling rig and operator. Whilst the IP was standing adjacent to the machine the rig operator moved the outrigger using the remote control unit. The IP's coat was caught on the top of the outrigger and this dragged his arm towards the cage, pinning his arm. The rig operator attempted to reverse the movement, but a failure in the hydraulic system caused the outrigger to further pin the IP's arm, causing significant injury to his forearm, including muscle damage and a fracture.



Potential Consequences

The outcome of this incident could have been more severe with the potential for the IP to suffer more significant injury and potentially lose a limb.

FIRST ALERT

13 April 2021

Causes of incident

The incident is currently under investigation, however there are some key points that can already be identified; this particular incident involved a Hutte drilling rig, but hydraulic systems, remote operated machinery and outriggers are present on many items of construction plant and so the risk of entrapment in the event of mechanical failure is always present.

Initial Findings

Failure of the hydraulic system caused the ram to move in the opposite direction and to keep moving in that direction even when the controls were reversed.

Line of Fire

Plant and equipment should never be operated whilst personnel are close to moving parts.

There is a potential for unseen damage to components due to misuse. The failure of the hydraulic ram, in this case, is possibly due to historic misuse, which despite inspection may have gone unnoticed.

Complacency of Competent Persons around familiar plant, inadvertently positioning themselves close to moving parts.

Action Points

If plant has been used inappropriately for what ever reason, report and ensure inspection is undertaken. An example would be driving your car with the handbrake on for a significant distance, You'd need to get the brakes checked.

Keep clear of all machinery not under your direct control, unless it has been isolated and confirmed by the operator. Thumbs Up.

Competent personnel maybe permitted to enter a restricted zone, but if they are not part of the operation should they be there, if the plant is not isolated? Respect the restricted zones.

Operators – ensure that all personnel are clear of moving parts before operating.

Any further suggested actions that arise at the conclusion of the investigation will be communicated in due course.