Stored Energy Incident - Resulting in a Major LIFE CHANGING Injury

WHAT HAPPENED

An accident occurred when a quarry fitter sustained a crush injury to his lower left arm. The damage to his arm was so severe that his hand was amputated above the wrist. The accident occurred whilst carrying out an unauthorised and unplanned task.

Prior to the accident, the injured party (IP) had been working with another fitter carrying out planned, risk assessed and permitted work on the Asphalt Plant (not related to the skip system). The plant operator had been experiencing problems with the skip door which had been sticking in the open position. The plant operator approached the two fitters and asked them to investigate the problem. The lead fitter told the plant operator to clear away the spilled material sitting beneath the skip so they could access the area safely. The lead fitter then instructed the IP not to go near the task until the spillage was cleared as it was thought this could have been interfering with the operation of the skip door.

Whilst the lead fitter was moving the works vehicle

out of the skip area to allow the key- interlocked gates to be fully opened and spillage to be cleared, the IP and the plant operator entered the skip perimeter guarded area. They became drawn into the job, tapping the track wheels and poking/prodding at a build-up of material within the skip. This was way beyond an initial look at what they should have been involved with.

The skip door (which was under immense stored energy from the tension in the springs, in the open position) closed whilst the fitter was partially inside the door frame with such force it suspended him by the left forearm. With the task not being risk assessed and in particular how the door mechanism operated they had not established that it posed a serious risk.

The fitter was released from the door by using a sling attached to a telehandler to pull the door against the tension in the springs. Emergency services took him to the local hospital but the damage was so severe that his arm needed to be amputated above the wrist.

The outcome being a life changing injury.

Additional Information:

 Works had been carried out on a similar door system the week before by the same personnel and had been subject to Risk Assessment, Permission to Proceed and Safe System of Work.

 The IP had received training in stored energy as part of isolation (LOTOTO) training, Quarry Passport, Risk Assessment & Task Specific (Dynamic) Risk Assessment.



LEARNING POINTS / ACTIONS TAKEN

- Re-enforce LOTOTO process and consider potential stored energy such as springs under tension in this case, known abnormal situation as the door being stuck open.
- Principle of operation not considered; employee eagerness drew him into becoming involved with the task. Commonly referred to as the 'Willing Worker'
- Interlocked key system on the access gates had been employed, however this does not provide power isolation to other areas of the plant including the mixer, mixer doors and associated equipment directly above the skip area, which could affect any work carried out below the mixer.
- Always ensure that the work you are carrying out has been authorised and subject to a Task Specific Risk Assessment/Safe System of Work and applicable permit.
- Never feel pressured into doing a task you have not prepared for fully i.e. Risk Assessment, Safe System of Work, Permits etc.
- Never disregard an instruction from your Supervisor and or Manager.

LOCATION: ASPHALT/COATING PLANT ALERT STATUS:

ACTIVITY: MAINTENANCE & HOUSEKEEPING DATE ISSUED: 02/10/2020 10:20:24

Normal

SUB ACTIVITY: N/A INCIDENT No: 02569