

Shared Learning

Water Bath Heater Tube Bundle Removal

contact



















TOP ENERGY

Orion





IP sustained Fracture to ankle

What happened?

During planned maintenance, a work party had been issued an access permit to remove a water bath heater tube bundle for inspection. The work party were halfway through removing the tube bundle using a purpose-built trolley/rail removal rig, when after a second trolley had been installed and secured with a rachet tie down, a wheel on the second trolley became jammed due to a misalignment. A worker attempted to lever the trolley into alignment unsuccessfully. The rachet tie down securing the second trolley was then loosened to allow the trolley to be moved. Another attempt to lever the trolley successfully brought it into alignment. Upon restarting the task, due to the rachet tie down not being retightened, the trolley rolled off the end of the rails and hit the lower leg/ankle of the injured party who was standing at the end of the water bath heater.

Taranaki

What did we learn?

Communication

A breakdown in communication across all members of the work party resulted in the contractor operating the removal rig not being aware of IP's position and no one identifying that the tiedown had inadvertently not been reengaged.

Managing change

When the trolley jammed a formal Step Back 5X5 to assess the risk was not undertaken

Intervention

When the IP was in an At-Risk position no one intervened

What actions are being taken?

- The operating procedure was revised to include a new method of securing the trolley and additional hazard controls
- A design review of the removal rig is scheduled to identify potential safety improvements.



Water Bath Heater Tubing bundle with removal rig



Trolley prior to falling showing position of wheels and tiedown