OIL INDUSTRY SAFETY DIRECTORATE
NOIDA
SAFETY ALERT

E&P (Onland) No. 04/18

Title: Injury during drifting of 3/12" tubing
Location: Near pipe rack
Activity Type: Drifting of 31/2" tubing.
Result/outcome: Fracture below the knee.

What Happened?

The tubing’s were placed on the pipe rack and drifting was being carried out with the help of regulated compressed air. During this process one person engaged in the drifting process got fracture below the knee due to hitting of the drift mandrel. The person was taken to city hospital where he was operated by the orthopaedic surgeon.

What Caused It?

The process of drifting was being carried out using compressed air with controlled pressure of 10-30psi. The drift mandrel got stuck probably due to wax deposited inside the tubing. The excess pressure accumulation inside the tubing lead to the ejection of the drift with force and the drift mandrel hit the mobile crane parked at a distance of approximately 3 meters at the end of the tubing’s placed on the pipe rack. The drift mandrel rebounded after hitting the crane and hit the person’s leg below the knee that was standing on the side of the tubing. The injured person was taken to the hospital and operated by an orthopaedic surgeon and discharged the same evening.

Corrective Actions:

1. SOP should be reviewed and revisited to prevent reoccurrence of similar type of incidents in future.
2. No equipment or personnel should be stationed in the line of fire during drifting operations.
3. In case of stuck drift mandrel, the tubing should be sent to ware house and should not be cleared with the help of compressed rig air.
4. Proper calibrated pressure gauge easily readable by the operator to be used during similar operations.
5. This type of incidents should be discussed in the trainings and tool box talks.

It is provided for information purpose. This information should be evaluated to determine if it is applicable in your operations, to avoid reoccurrence of such incidents.