COS SAFETY SHARE

WHAT WILL WE DO TO PREVENT THIS FROM HAPPENING HERE?

CENTER OF GRAVITY MISCALCULATION RESULTS IN DROPPED PIPE

What happened?

While construction was removing the existing flowline at the facility using a crane, the crane was connected to a section of demo’d piping to be removed to a scrap metal basket on the top deck. The lift came from underneath the top deck of platform. Riggers were on the scaffolding below the top deck to help guide the pipe out from the rack once it was cut. While coming out with the pipe, the lifting sling was repositioned at the estimated Center of Gravity to make it balanced once it cleared the underside of the deck. A tagline was attached to the pipe, and as it was being pulled out, the workers on the scaffolding realized that they might be in the line of fire, so the tagline was released, and as the pipe cleared the deck, it began to seesaw, tapping the handrail in an upward motion knocking it out of the sockets resulting in it falling approximately 25ft to the deck below. The deck below had been barricaded with hazard tape before the event to restrict access to the area since work was occurring overhead. No one was in the area when the handrail fell.

What went wrong?

The lift plan identified 10’ pipe sections, but the actual length of the pipe segment in this event was close to 20’ in length. This was not communicated when the JSA was developed.

Readjustment of the double choked sling was not addressed in the JSA.

Why did it happen?

The work team, when performing the JSA to demo this section of pipe, did not identify the appropriate rigging requirements for pulling the demo’d pipe section out from under the deck horizontally.

When the sling used to double choke the pipe section was repositioned, the section was not balanced to allow for a controlled lift with the crane and it started to move in a see-saw motion, contacting the handrail.

What areas were identified for improvement?

Ensure that the hazards specific to the task at hand are reflected in the JSA when performing similar tasks.

Identification of a more appropriate means of rigging the pipe section to reduce movement during lifting.

Identification of tagline requirements for controlling similar loads.

Cutting the flow line into shorter, more manageable sections for removal to reduce rotational momentum and improve controllability of the load with an appropriate number of taglines.

Consider using a trailing “back up” to steady and control the movement of the pipe as it was being pulled out from the rack under the deck.

Identification of Stop Work triggers and communication of job plan to affected workers.

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