SAFETY Alert

PREPARED BY: Corporate QHSE Dept.

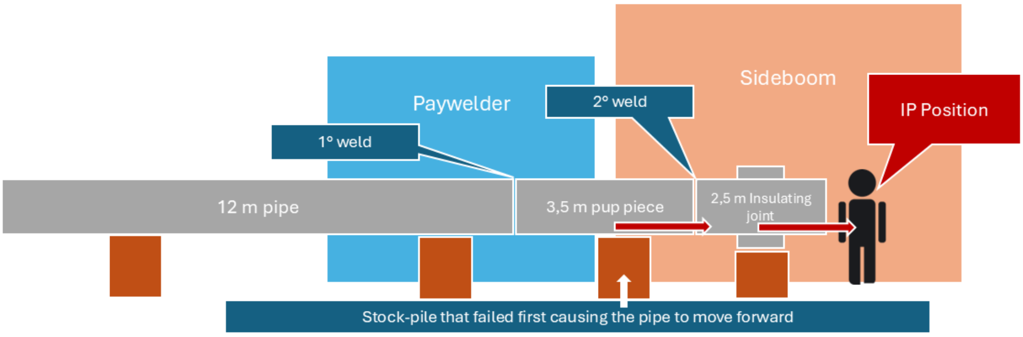
N°	11/2024	Date:	November 2024
OBJECT:	**PIPE SHIFT DURING WELDING**		

DESCRIPTION

During the manual welding of a system composed of a 12-meter pipe, a 3.5-meter pup piece and an insulating joint, the system moved forward movement due to the collapse of the central stocks-pile and the simultaneous movement of the other stocks-piles. The forward movement of the pipe hit the left shoulder of the grinder who was operating on the left side of the pipe near the insulating joint.

CONSEQUENCE

- Medical treatment case for grinder hit by pipe;
- High potential injury to grinder and other personnel;



CAUSES

- <u>Safety devices inoperable or removed</u>
  - During the welding of the insulating joint with the pup piece (2nd weld), 1 stocks-pile is added under the insulating joint for a total of 4 stocks-piles on the entire assembly system (pipe plus joint) and there was also a sideboom that safely supports the insulating joint. During the execution of the third welding pass, as per instructions of the supervisor, the sideboom was removed to carry out other activities.
  - The stock-piles were not made according to the company standard.
  - The 12-meter pipe was supported only by stock-piles despite the project risk assessment requiring the use of mounds of earth at the start of the column and every three pipes.
- <u>Inadequate technical skills</u>: the person in charge of the activities did not assess the compliance of the stock-piles.
- <u>Inadequate risk perception/risk underestimated</u>: The person in charge removed the sideboom that was keeping the system safe before the end of operations.
- <u>No work planning or risk assessment performed</u>: No JSA or TBT was performed on the day of the incident.
- <u>Risk assessment not effective/adequate</u>: manual welding and tie-in project risk assessment does not clearly indicate when the lifting equipment that secures the system must be removed, furthermore it does not specify that during the removal of the lifting equipment the area must be free of personnel.
- <u>Lack of supervision:</u> at the time of the incident the supervisor was not present in the work area.

CORRECTIVE AND PREVENTIVE ACTIONS

Measures adopted to prevent recurrence of similar incidents:

- Update the risk assessment of the automatic, manual and tie-in welding phases regarding the removal of the lifting device that secures the pipe only after welding has been completed and after securing the pipe with a pile of earth or stockpiles. During the removal of the lifting device, the area must be free of personnel.
- Arrange a mound of earth to stabilize the system to be welded when possible.
- Additional training for welding preparation teams regarding the proper type and correct arrangement of stockpiles based on the system to be supported.
- Communicate this incident to all workers during the safety standdown and raise awareness of the correct practices for securing the column or welded system.
- Disciplinary action for the Supervisor in charge.

RECEPTION BY THE PROJECT	
WHICH ACTIONS IDENTIFIED TO BE IMPLEMENTED IN THE PROJECT:	
Project Manager: Signature:	**HSE Project Manager**: Signature: