ACTIONABLE LESSONS LEARNED: Overhead Filter Presses





Entanglement and Crushing

Incident Overview

Atlantic Copper - January 4, 2024

When an operator was carrying out the cake discharger operation from the overhead filter presses, a failure in the plate system was detected. While looking for possible causes, the employee tried to check the pulley of the plate transport system. During the inspection, the employee tripped and rested their right hand between the pulley and cable of the transport system, trapping two fingers.



Causal Factors

• Employee stuck hand in the filter press pulley system to troubleshoot a malfunction.

Site Specific Actions



• **Engineering** – Have manufacturer fabricate a guard to cover the filter press pulley system.



 Administrative – Communicate to machine operators that malfunctioning equipment should be reported to maintenance, not worked on by the operators.

Steps YOU Can Take to Prevent Repeat Incidents





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Effluent Treatment Plant Operators

- Stop the job if equipment is malfunctioning. Immediately report to supervision.
- Perform Fatal Risk Management (FRM) verification to confirm all critical controls are in place.
- Isolate and de-energize equipment before working on machinery that has moving parts or electrical hazards.
- Maintain proper hand/body placement and stay out of the line of fire.



Effluent Plant Leadership

- Review and audit critical components of Entanglement and Crushing associated with Fatal Risk Management program.
- Commit to having a clear safety plan and monitoring system. Verify safety controls for routine work are clearly identified.
- Frontline Supervisors, Senior Supervisors, Superintendents, Managers: when walking your department and work areas, evaluate tasks and associated risks. Communicate these risks to your team.



All of Us

- Utilize your stop work obligation when control improvements are identified or if machinery is not operating properly.
- Utilize knowledge checks to regularly confirm your understanding of your training.
- Understand fatal risks and the associated critical controls for your work areas.



Actionable Event: Overhead Filter Presses

FREEPORT-McMoRan Actionable ID # 2024-1

Event ID # 20012570



Entanglement & Crushing

Preliminary Incident Details	
Operation	Atlantic Copper
Date / Time	January 4, 2024 / 12:43 p.m.
Event Type	Injury
Summary	When an operator was carrying out the cake discharger operation from the overhead filter presses, a failure in the plate system was detected. While looking for possible causes, the employee tried to check the pulley of the plate transport system. During the inspection, the employee tripped and rested their right hand between the pulley and cable of the transport system, trapping two fingers.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	Engineering Controls: Moving Machinery not guarded
Applicable Policies / Procedures	Control of Hazardous Energy Sources (LOTOTO)
Employee Condition	Amputation of second and third fingers of employee's right hand
Contact	Ignacio Romero Martin, Health and Safety Manager

Photos / Links





