PFE LESSONS LEARNED: Employee Pinned by Drive

SAFE PRODUCTION MATTERS

Lifting Operations

Incident Overview

Morenci, March 12, 2024

Two contractor mechanics were replacing a 1600-pound final drive on a D8 dozer with the assistance of a forklift. One mechanic was operating the forklift while the other mechanic was greasing the mounting seal. The loaded forklift, positioned 6 to 10 feet behind the mechanic, began to roll forward. The operator applied the brakes which caused the final drive to roll off the forklift. The ground mechanic's leg became pinned between the final drive and the dozer.

Causal Factors

- The c-clamp for replacing the final drive was not on site. A forklift was used instead.
  - There is an Original Equipment Manufacturer (OEM) procedure for this task, including the use of the engineered tool. The OEM was not readily available nor followed.
  - The job safety analysis (JSA) did not address the risks involved.
- The 1600-pound final drive was secured to the forklift with a 500-pound come-along chain. This method prevented backward movement only.
- The forklift was kept in the neutral "inching" position while stopped. The parking brake was not set.

Site Specific Actions

- **Engineering** – Add a smooth pad or work area in the Swapp maintenance yard.
- **Administrative** – Communicate the expectation that Swapp follow OEM maintenance procedures.
  - Verify procedures are followed as outlined by the OEM including tool requirements and the handling of final drives.
  - Expectations will be included in the Maintenance Equipment Reliability Standards v.3 and shared on the Freeport contractor portal. **Global Action Item**
- **Administrative** – Evaluate contractor maintenance programs for tooling, procedures and designated areas for on-site repairs. Establish minimum facility requirements.

Steps YOU Can Take to Prevent Repeat Incidents

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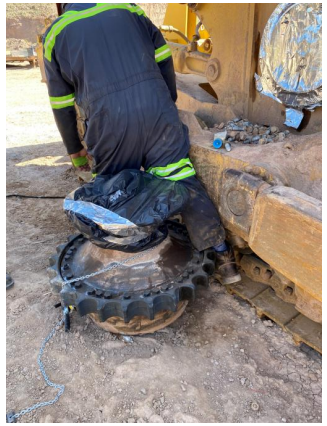


Maintenance Employees and Contractors

- **Stop work** if you do not have the correct tools or equipment to safely complete the task.
- Verify loads are adequately secured to forklift to avoid unexpected shifts and movement.
- Utilize manufacturer tools and procedures for maintenance tasks.
- Rushing to get work done without the proper tools is unsafe… stop. No job is so important and no schedule so urgent that time cannot be taken to plan and perform work in a safe manner.

Freeport Leadership

- Establish a process to regularly check on contract work. Review maintenance tasks to verify proper tools are available and work areas are constructed to safely complete on-site repairs.
- Participate in contractor safety meetings; vocalize the importance of safe production to all contractors.
- Verify employees understand and utilize manufacturer procedures.

All of Us

- Assess what tools and equipment you need prior to starting a task. Stop work if you do not have the correct tools or equipment.
- Adequately secure loads on forklifts to prevent shifting or movement.
- Rushing to get work done without the proper tools is unsafe… stop. No job is so important and no schedule so urgent that time cannot be taken to plan and perform work in a safe manner.

Potential Fatal Event: Employee Pinned by Drive

Lifting Operations

FREEPORT-McMoRan

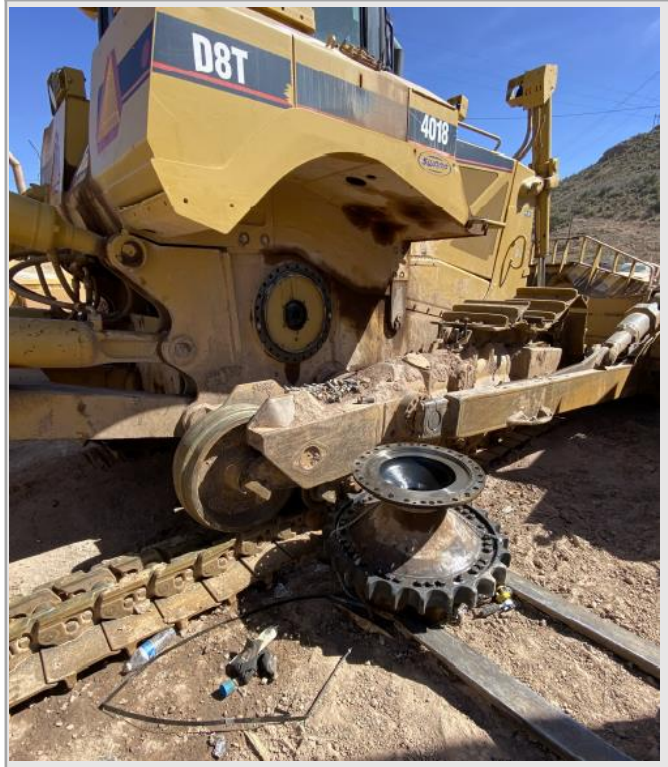
PFE # 2024-7
Event ID # 20014069

SAFE PRODUCTION MATTERS

Preliminary Incident Details

Operation	Morenci
Date / Time	March 12, 2024 / 11:45 a.m.
Event Type	Injury – First Aid
Summary	Two contractor mechanics were replacing a 1600-pound final drive on a D8 dozer with the assistance of a forklift. One mechanic was operating the forklift while the other mechanic was greasing the mounting seal. The loaded forklift, positioned 6 to 10 feet behind the mechanic, began to roll forward. The operator applied the brakes which caused the final drive to roll off the forklift. The ground mechanic's leg became pinned between the final drive and the dozer.
Risk Category	PFE - Significant (3) Likely (3)
Findings / Missing Controls	• Engineered lifting device was not used • Forklift parking brake was not set • Forklift load was not properly secured
Applicable Policies / Procedures	• Lack of forklift applicable policies and procedures
Employee Condition	• Mechanic – knee injury • Forklift Operator – hand laceration from helping lift the final drive off the pinned mechanic
Contact	Dale Patterson, Manager-GSC Dana Wise, Manager-Health and Safety

Photos / Links



Final resting place of final drive after rotating off the forklift

Re-enactment of employee's leg pinned between final drive and D8