Incident Learning: What happened?

- On the 11th of May at approximately 10:00 am three workers were busy carrying 6-inch rubber hoses that are being used for vacuuming sludge inside Tank C1
- While carrying one hose and walking to connect it with another hose, the worker in front slipped and landed on his right knee
- The worker stood up and continued with his duties until lunch hour.
- After lunch the crew continued with work
- At 15:00pm the worker started feeling pain and discomfort to his knee and went to report the incident to his supervisor
- Emergency Protocol was activated

1: 6-Inch Suction Rubber Hoses that was lifted.

2: Slippery substance on the tank floor

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What are the learnings for implementation?

Casual Factors	Root Causes	Corrective Actions
Slippery floor due to mixed product of crude oil and water in combination with the coated tank floor	**No mitigations identified to reduce the slipperiness based on the change in condition.** This is the first time we cleaned a crude oil tank with internal floor coating. Normally, when cleaning crude oil tanks, to reduce the slipperiness of the sludge mixture, peatsorb and lime are added. However, due to the product (Crude oil mixed with water) being recycled back into tank C12	Tank team needs to improve the standard of risk identification for all tank cleaning activities by reviewing and assessing the following aspects; ✓ Prep and plan ✓ Safety plan.
Key Findings		
The incident reporting was delayed due to employee not familiar with incident reporting management		Re-enforce with supervision that when an incident occurs, they should be reported immediately to the relevant AE parties, Incident management team.
The head lamps that are used inside the tank during dirty entry only illuminate areas where employees are working on.		Explore additional options or methods that are refinery approved for internal tank cleaning process (Tank dirty entry).