

ACTIONABLE LESSONS LEARNED: Water Truck Hits Berm



Vehicle Collision

Incident Overview

Morenci, March 10, 2024

During a second run to water drills, a water truck was travelling on a ramp with approximately 10,000 gallons of water in the tank. At the top of the ramp, the operator identified the area was no longer adequate to safely turn around without running over drill holes. The operator decided to back down the ramp to exit the work area. While backing down, the truck drove through a berm and was high centered at a 45-degree angle. On the other side of the berm was an approximate 180-foot drop.



Causal Factors

- Water truck operator was not informed that drill hole airbags are intended to maintain the integrity of the drill holes so they can be driven over.
- Water truck operator did not request a spotter while maneuvering out of a congested work area.

Site Specific Actions



- **Administrative control** – Backing down ramps will no longer be permitted for water trucks and lube trucks. If an operator is in a situation where they need to back down a ramp, a supervisor will determine the best course of action (dozer to widen ramp/road, provide spotter, etc.).



- **Administrative control** – Update heavy equipment training (water trucks, 777s, lube trucks, etc.) and In-Pit Driving training to include:
 - No backing down ramps
 - Purpose of drill hole air bags



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Mine Employees

- When driving any type of equipment, and in tight quarters, request a spotter to assist with backing up.
- Do not back water trucks or lube trucks down ramps.
- If you find yourself in a situation where you need to back down a ramp, stop and ask your supervisor for help. Your supervisor will determine the best course of action (dozer to widen ramp/road, provide spotter, etc.)



Mine Leadership

- Communicate about your jobs each day. Discuss the risks and controls that need to be in place.
- Make field visits to verify that critical controls are in place.
- Periodically assess the knowledge of your employees to help ensure competence in the jobs they are performing.



All of Us

- Be our brother's keeper. If you see something is unsafe, take a moment to stop the job and see if assistance is needed.
- Encourage one another to stop the job and to ask for help when needed.
- Be the example of the behaviors that you want to see.



Actionable Event: Water Truck Hits Berm

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Preliminary Incident Details

Operation	Morenci
Date / Time	March 10, 2024 / 2:05 a.m.
Event Type	Property Damage
Summary	During a second run to water drills, a water truck was travelling on a ramp with approximately 10,000 gallons of water in the tank. At the top of the ramp, the operator identified the area was no longer adequate to safely turn around without running over drill holes. The operator decided to back down the ramp to exit the work area. While backing down, the truck drove through a berm and was high centered at a 15-degree angle. On the other side of the berm was an approximate 180-foot drop.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	<ul style="list-style-type: none"> Berms were sufficient height and width Operator failed to follow operating procedure inhibiting reverse travel with water load
Applicable Policies / Procedures	Applicable Morenci SOP
Employee Condition	No injuries
Contact	Rassie Ras, Manager-Health and Safety

Photos / Links



Water truck on berm



Water truck tire marks on ramp and impacted berm



Arrow points to location of water truck on berm