



Potential Fatal Event: Haul Truck Collides with Articulated Truck

Preliminary Incident Details

Operation	PT Freeport Indonesia
Date / Time	May 19, 2023 / 10:36 a.m.
Type	Property Damage
Summary	A loaded haul truck collided with an articulated dump truck while coming around the curve of a haulage road. The haul truck turned too far to the right, causing the right outer wheel to hit the right front structure of the articulated truck. Damage included a broken rightwing mirror bracket, shattered glass pane and mangled right fender. No one was injured.
Fatal Risk	Vehicle Collision or Rollover
Risk Category	Actionable
Pre / Post Rating	Significant (3) Likely (3)
Findings / Missing Controls	Positive communication Segregation controls for heavy equipment/light vehicles
Applicable Policies / Procedures	SOP-4.04-EWHL-006-00: Truck Operations at Grasberg SOP-SM-2.18-PIT-016-01: Articulated Truck Operations at Surface Mine SOP-404-EWLP-001-02: Articulated Truck Operations at Grasberg
Employee Condition	No injuries
Contact	Norman Aprianto, Safety Compliance Officer

Photos / Links



Damage to the right front side of the articulated truck



Skid marks visible on outer right wheel of haul truck



Potential Fatal Event Learnings: Haul Truck Collides with Articulated Truck

Causal Factors

- Haul truck operator turned too far to the right around the curve in the haulage road.
- Articulated dump truck operator failed to meet safe driving procedures (did not come to a full stop, was cleaning cab window while in motion)
- Lack of traffic management controls at the curve in the road

Action Items	Hierarchy of Controls
• Review and update Standard Operating Procedures for haul truck operations and articulated dump truck operations.	Administrative
• Recommunicate SOPs to appropriate crews. For articulated dump truck operation, this includes the need to stop in a safe position when conducting other activities and to always maintain positive communication (eye contact/radio communication).	Administrative
• Construct traffic segregation berm along the curve of the road	Engineering
• Review road design and ramp entrance	Engineering
• Develop and construct traffic management improvements in the area as well as other areas with narrow access	Engineering

Additional Learnings / Opportunities

- Compliance with current Heavy Equipment Operation procedures needs to be more consistent.
- Need to reemphasize the importance of always maintaining positive communication.

Fatal Risk Management Controls

- Pre-Operational Check – INSUFFICIENT**
- Records of pre-op check were not available after the incident
- Human Factors – SUFFICIENT**
- Seatbelts were used and operators were fit for duty.
- Operator Competency – INSUFFICIENT**
- Both operators were operating their equipment in ways that deviated from procedure
- Road Design & Condition – SUFFICIENT**
- Road design and conditions met standards at the time of the incident. However, design specs are being updated to improve engineering controls used to mitigate this risk.
- Communication – INSUFFICIENT**
- The AT operator used the horn to warn the HT operator, but this was not effective.