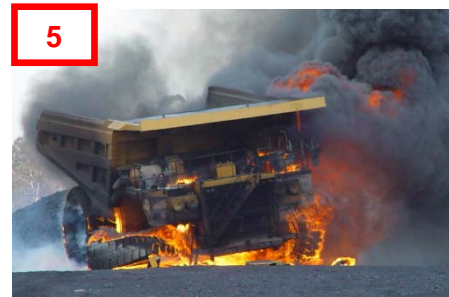


Risks to be mitigated



1. Equipment Access & Egress	
Objective	The objective is to minimise the risk of events related to approach, access & egress of equipment; as well as slip/trips, sprains/strains, falls from height and failure to egress in emergency events to ALARP, including consideration in design for foreseeable human error.
General outcome	The intended design outcome should include the following: Adequate/suitable stairways, walkways, access platforms, railings, steps/grab handle combinations and boarding facilities including an alternate path for disembarking in case of emergency. Specific to hauling trucks, a priority outcome would also be ground entry to access on driver's side, with the opportunity to locate isolation and other service points (hydraulic, air) near the driver's side operator access.
Risks to be mitigated	<ol style="list-style-type: none"> 1. Risk of collisions due to persons and small vehicles being positioned on the operator's blind side 2. Risk of collisions due to operator vision from the cabin being restricted by machine access and other structures 3. Risk of slips trips and falls during access to service points and work platforms due to lack of fall from height protection, slippery surfaces, accumulation of dirt or other material or poorly lit at night 4. Risk of sprains and strains due to ergonomically difficult body positions when accessing equipment 5. Risk of entrapment should normal access be blocked by fire or machine damage 6. Risk of explosion injury due to tire heating on front tire positions 7. Risk of materials falling off platforms that are above 1.8m (6 feet) on to persons below 8. Risk of injury caused by fasteners, brackets and fittings that protrude into the walkways
Examples of industry attempts to mitigate risks	<p>For haul trucks</p> <ol style="list-style-type: none"> a. Ground entry to access from driver's side, with the opportunity to locate isolation and other service points (hydraulic, air) near this operator access <p>All equipment</p> <ol style="list-style-type: none"> b. Sufficient independent egresses, one of which is the normal access stairway c. Emergency egress free and unencumbered with path-to-ground as rapid as possible d. Non-slip surfaces and edges suited to operating conditions (ice, mud, etc.) e. Adequate access lighting with two-way switching from cab and ground level, step tread highlighting f. Steps designed to minimise damage in operation, minimise impact on operator visibility and minimise accumulation of material g. Guardrails that protect for fall during access h. A stable, bottom step on the access that is not greater than 400mm (16 inches) from level ground i. Specialised powered access systems designed for primary access only that fail to a safe position and can only be able to lower when the machine has been parked with all implements lowered and the park brake applied. j. Kickboards that prevent objects from falling from platforms onto persons that may be below

Industry attempts to mitigate risks

