

Excavator Access Ladder Causes Foot Injury

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Equipment: Caterpillar 6040 Excavator

Hazard: Mechanical / Caught in Nip Point

What happened?

Recently on a Central Queensland Surface Coal Mine an excavator retractable access ladder was in the process of lifting, when a coal mine worker (CMW) positioned themselves near the top of the ladder, facing the machine room wall. The ladder completed its lifting cycle and trapped the workers foot between the floor and the rotating handrail (refer re-enactment photo).

How did it happen?

The ladder control switch design did not require the operator to be in contact with the control whilst the stairs were operating. The operator can move away from the switch once movement has started.

Comments

It is recommended that all surface mines implement equipment access ladder switches that require the operator to be in control of the switch at all times the ladder is in operation and stops if at any time the operator's hand is not on the switch (dead man's switch).

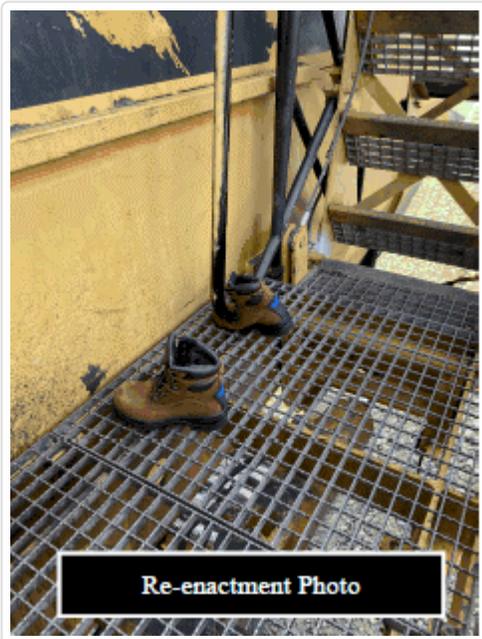
In its final upper resting position, the handrail was very close to the floor, creating a configuration where a foot or other body part can be trapped.

Key issues

Recommendations

Mine operators are advised to audit all retractable access ladders on their equipment for similar issues, both implementation of a Dead Man's Switch and identification of nip points and rectify in conjunction with the OEM where required.

References and further information



Re-enactment photo of the incident

(https://www.dnrme.qld.gov.au/__data/assets/image/0005/1520627/Reenactment-Photo.png)

Authorised by Peter Newman - Chief Inspector of Coal Mines

Contact: Theo Kahl, Inspector of Mines, +61 7 4936 0127 QldMinesInspectorate@rshq.qld.gov.au

Issued by Resources Safety & Health Queensland

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