

INVESTIGATION INFORMATION RELEASE

DATE: DECEMBER 2021

Rear dump truck narrowly avoids collision with light vehicle

Incident date: 6 December 2021

Event: Dangerous incident at an open cut coal mine

Location: Maules Creek Mine, near Boggabri NSW

Overview

A supervisor, accompanied by another worker, was driving a Toyota dual-cab 4WD utility (light vehicle) along a haul road when he stopped at an intersection to give way to a Caterpillar 789 rear dump truck (Cat) on his right in accordance with the mine's protocols. At that time a fully-laden Hitachi EH5000 rear dump truck (Hitachi) approached from behind the light vehicle, around a left-hand bend in the road and continued travelling. He did so as he had the right of way over the Cat and had not seen the light vehicle over the windrow of the left-hand bend in the road. The Hitachi operator first saw the light vehicle sometime after he rounded the bend and took evasive action to avoid a collision.

Figure 1 and 2: Location of Hitachi and light vehicle after near collision



The mine

Maules Creek Coal Pty Ltd, a subsidiary of Whitehaven Coal Limited, is the mine operator of the Maules Creek Mine. The mine is a large open cut coal mine located 45 km south-east of Narrabri in the Gunnedah basin of New South Wales.

Maules Creek Mine uses ultra-class mining equipment in the strip-mining process. Overburden and coal is mined by trucks and excavators. The mine produces thermal coal which is transported by rail to Newcastle for export.

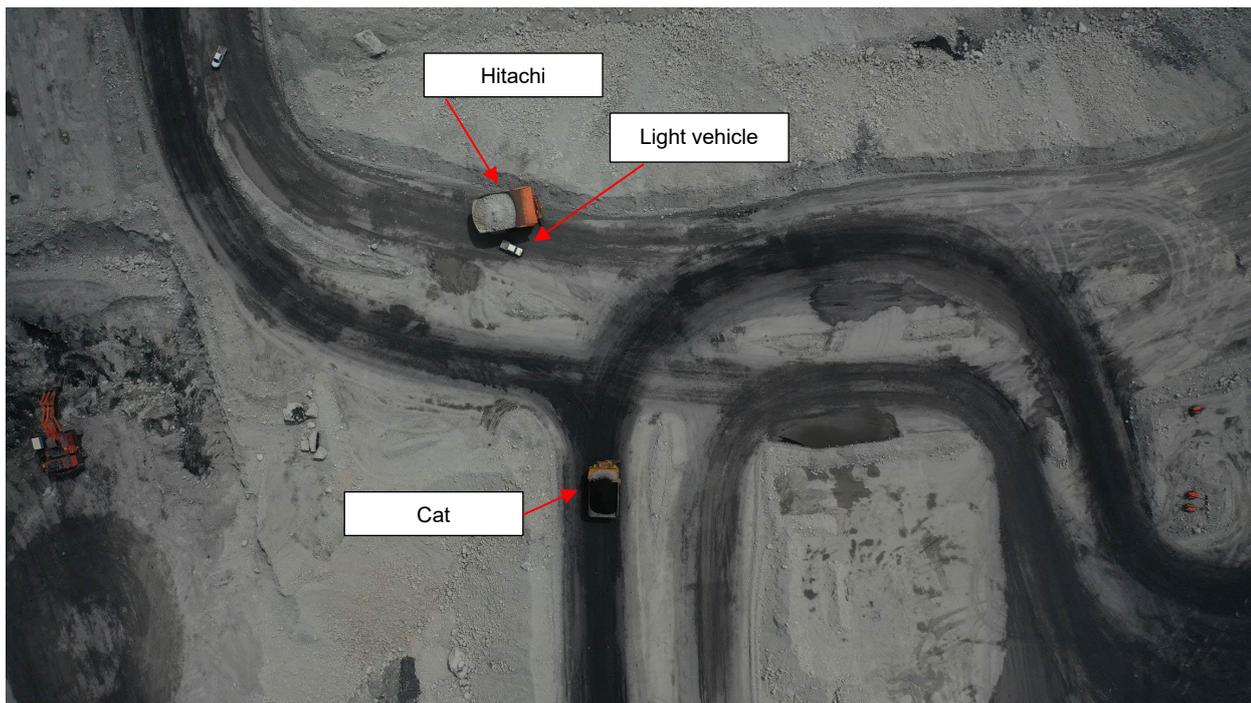
The incident

At about 2:00 pm on 6 December 2021, a fully-laden Hitachi narrowly avoided colliding with a light vehicle at an intersection on the mine haul road.

The Hitachi is one of the largest rigid-frame trucks used in NSW mines with a payload of 296 tonnes and gross vehicle weight of 500 tonnes. The light vehicle is the primary-type of light vehicle used in the mine and has a gross vehicle weight of about 3 tonnes.

The incident occurred at a T-intersection between multiple excavator loading areas and an in-pit dump.

Figure 3: Aerial view of incident



Just prior to the incident, the light vehicle operator (drill and blast supervisor) had picked up a worker from the drill preparation area and was driving him to the bench below. He stopped the light vehicle prior to the T-intersection to give way to the Cat as it ascended the ramp to his right. He had stopped

short of the intersection to allow the haul truck sufficient room to navigate the corner and ensure clear vision in accordance with the mine's protocols.

At the same time the Hitachi left the excavator area and was travelling to the in-pit dump. The Hitachi operator had not seen the light vehicle leave the drill preparation area nor had the light vehicle driver seen the Hitachi.

As the Hitachi operator continued to the in-pit dump he noticed the Cat further ahead to his right but did not notice the light vehicle at the intersection over the windrow of the left-hand bend in the road. On that basis the Hitachi operator assumed the right of way as haul trucks are required to give way to other haul trucks on their left as their cabs are positioned on the left side.

The Hitachi operator continued to focus his attention on the Cat. The windrow height ranged from 2.8 m to 3.8 m on the bend and the Hitachi operator estimated he was travelling around 30 km/h.

The light vehicle driver recounted that he thought it 'strange' that the Cat was stopped before suddenly realising that another haul truck must be coming from behind him. The light vehicle driver reported that he looked into the rear vision mirror and saw the Hitachi approaching. He put the light vehicle into gear and was able to move a small distance forward and to the right as the Hitachi arrived.

The Hitachi operator states that he first saw the light vehicle sometime after he rounded the bend at which time he applied the haul truck's retarder and took evasive action by driving the Hitachi to the left into the windrow narrowly avoiding the light vehicle. The Hitachi emergency braking system was not activated.

The Hitachi's front right-side wheel missed the light vehicle by less than one metre with the two vehicles coming to rest about 1.65 m apart.

The investigation

The NSW Resources Regulator has commenced an investigation to determine the cause and circumstances of the incident. The investigation will, among other things, consider the design of the haul road and intersection, windrow heights and transport management plans relevant to the incident.

The mine operator is co-operating with the investigation.

Safety observations

Mine and petroleum site operators are reminded of their duty to identify hazards and manage risks to health and safety in accordance with the provisions of the *Work Health and Safety Act 2011* and *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and regulations.

Mine operators must:

- develop and implement a Roads or Other Vehicle Operating Areas Principal Hazard Management Plan in accordance with *Part 2 of Division 2* and *Part 2 of Schedule 1 of the*

Work Health and Safety (Mines and Petroleum) Regulation 2014 directed toward identifying hazards, assessing risks and controlling risks to the lowest level reasonably practicable associated with the operation, interaction and movement of mobile plant

- In controlling risks arising from the operation, interaction and movement of mobile plant consider:
 - all reasonably foreseeable risks arising from interactions between mobile plant with different operating characteristics (light and heavy vehicles)
 - the design and layout of all roads used by mobile plant
 - the conditions of roads and intersections including the line of sight for heavy vehicle operators, the restricted vision (blind side) of heavy vehicles, windrow height and fit for purpose warning signs
 - assessing the practicability of installing collision avoidance and proximity detection systems on mobile plant to alert operators of imminent interactions and the need for evasive action.

Further information

Please refer to the following guidance materials:

- [MDG15 Mobile and transportable plant for use on mines and petroleum sites](#)
- [IIR18-03 Serious injury at open cut coal mine.](#)

About this information release

The Regulator has issued this information to draw attention to the occurrence of a serious incident in the mining industry. Further information may be published as it becomes available.

Visit our [website](#) to:

- learn more about our work on causal investigations and emergency response
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