

Investigation information release

Date: December 2022

Loader falls into stope

Incident date: 26 November 2022

Event: Loader fallen into void.

Location: Perilya Potosi operation, Broken Hill, NSW

Overview

A mine worker was extracting material from a development heading on the 16 level in an underground section of the Potosi mine on Sunday, 27 November 2022, when the loader's right-hand side dropped into a void in the floor of the drive. The operator exited the machine and immediately notified the shift supervisor. The incident was escalated, and the decision was made to isolate the area and reassess the situation on day shift. Overnight, the void enlarged and the loader fell about 15 metres into a previously mined stope.

The mine

The Potosi mine is an underground metal mine about 4 kilometres north of Broken Hill in the far west of NSW. The Potosi resource is comprised of several narrow, ribbon-like lenses of ore that contain zinc, lead and silver. The mine operator is Perilya Broken Hill Limited.

The incident

A loader operator was extracting material from a previously fired development heading at the 16 NPE 3400 north on the 16 level at the Potosi underground mine. While bogging, the loader operator felt the loader sag to the right and thought there was a flat tyre on the CAT 2900 loader. The operator exited the machine and saw the right-hand side wheels of the loader had dropped into a void that had formed in the floor of the drive. The operator immediately notified the shift supervisor.

The incident was escalated to the mine's senior management who decided to barricade the area and further investigate the situation on the following shift. During the night, the void which had developed at the development heading, enlarged letting the loader fall about 15 metres into the previously mined stope. The loader came to rest on the level below.

The investigation

The NSW Resources Regulator has begun an investigation to determine the cause and circumstances of the incident. The investigation will explore the mine design and approval processes including:

- the process for peer reviews of mine designs
- the approval process for amendments to approved mine designs

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- instruction, training and supervision of the design engineers
- the adequacy of risk assessments, work instructions and procedures relevant to the incident.

The mine operator is cooperating with the investigation. A report will be published when the investigation is concluded.

Figure 1 Loader in the 16 level 3400 NPE development drive in the void in the floor



Figure 2. Void opened up on the 16 level 3400 NPE development drive



Figure 3. Loader in the 17 level 3400 NPE stope.



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Recommendation

Mine operators should ensure that all known voids are documented and the process for any designs including changes to designs are thoroughly reviewed before the plans are approved.

Further information

Please refer to the following guidance materials:

- [Safety Alert SA02-10 Dangers of large unsupported voids in underground mines](#)

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.

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