NSW GOVERNMENT

NSW Resources Regulator

INVESTIGATION INFORMATION RELEASE

DATE: OCTOBER 2020

Death of miner at opal mine

Incident date: 14 October 2020

Event: Fatality in underground opal mine

Location: MC51724 and MC28809 Grawin Opal Fields (near Lightning Ridge), NSW

Overview

An opal miner went from an underground opal mine to the surface to investigate a fault with the mine's material hoist. He was found unresponsive in the sump of the hoist shaft a short time later. The sump was approximately seven metres beneath the surface. He was later declared to be deceased.

Figure 1 Hoist bucket and motor system at the opal mine

The mine

The underground opal mine (MC51724 and MC28809), situated on Mineral Claims, is in the Grawin Opal Fields, about 40 kilometres southwest of Lightning Ridge, NSW.

The incident

The incident occurred about 2.20 pm on Wednesday 14 October 2020. Two workers were mining in the underground opal mine (Workers A and B). A powered material hoist, known as a 'long throw' was being used to raise claystone to the surface. The hoist system consisted of a steel frame, electric motor, hydraulic system, steel guide rails, a winder drum, steel wire rope and a steel bucket. The hoist shaft was approximately seven (7) metres from the sump to the surface and was fitted with an access ladder and a rail/ladder which the steel bucket travelled upon. The open shaft was protected by a perimeter fence.

While working underground, Worker A (the deceased) identified that the hoist bucket had failed to come back down the shaft and he went to the surface to investigate. Worker A informed Worker B that he would access the surface using the emergency shaft access, however it has not been confirmed which access shaft he actually used.

A short time later Worker B, who was underground in another section of the mine, heard a noise and walked about six metres to the hoist shaft where he found Worker A unresponsive in the sump between the bucket and the ladderway.

Worker A appeared to suffer significant head trauma and was later declared deceased by attending paramedics.

Members from the Resources Regulator, NSW Police, NSW Ambulance, the State Emergency Service (SES) responded to the incident.

Figure 2 Material hoist shaft at the opal mine

Preliminary investigation observations

The NSW Resources Regulator has commenced an investigation to determine the cause and circumstances of the incident. While the investigation is still in its preliminary stages, it is suspected that Worker A may have fallen down the shaft while attending to the malfunction of the hoist and bucket.

It appears that Worker A may have been wearing a hard hat, but there is no evidence that he was wearing a safety harness or using any other fall prevention equipment.

The investigation is considering whether any malfunction of the hoist materially contributed to the incident.

Notwithstanding the above, as the investigation is still in the preliminary stages investigators are considering other possible causes, which include whether Worker A:

- fell down the shaft due to a medical episode
- was struck by the bucket whilst travelling in the hoist shaft
- was working in the sump and struck by a descending bucket.

A detailed investigation report will be published once inquires have been concluded.

Safety information

Mine operators accessing a mine using a shaft must ensure they have considered the risks and implemented measures to prevent falls. Where falling is not preventable, miners must implement measures that mitigate the impacts of a fall (such as the application of fall restraint/arrest systems). If a ladder is used for access it must be fit-for-purpose and regularly inspected.

Mine operators must ensure that material hoisting systems are functioning correctly and understand any design or functional limitations. If work is to be undertaken in a shaft, the material hoist bucket must be secured, either at the bottom of the shaft or at the surface, with the hoist system isolated and protective guarding installed to prevent the bucket or other items from falling down the shaft. Workers should not undertake any task in a shaft under suspended or unsecured shaft equipment.

Material hoists are not designed to carry people or have people working directly underneath the material hoist bucket.

Mine safety management systems must set out the systems, procedures, plans and other control measures that will be used to control risks to health and safety at the mine. A working at heights plan should be developed that considers self-rescue and emergency management.

There are a number of health and safety duties set out in the *Work Health and Safety Act 2011* (NSW) and *Work Health and Safety (Mines and Petroleum Sites) Act 2013* (NSW). These duties are applicable to people who operate material hoists and person-riding hoists at opal mines.

In particular, mine operators should review the following information:

- Opal & gemstone mining under the WHS (Mines) laws
- Regulation 49 - *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* - Operation of shaft conveyances

Further information

Please refer to the following guidance materials:

- Code of Practice - Managing the risk of falls at workplaces
- Investigation report - The death of Mark Siegel at mineral claim 44507 near Lightning Ridge on 4 November 2016
- Safety Alert 18-14 - Opal miner injured in shaft fall - December 2018
- Safety Bulletin 18-10 - People warned of falling risks at opal mine shafts - May 2018

About this information release

The Regulator has issued this information to draw attention to the occurrence of a serious incident in the mining industry. Preliminary observations are provided to enable quick learnings and share information about potential risks and causes. However, suspected causes may change as the investigation progresses and new information and evidence is obtained. Further information may be published as it becomes available, and a final report will detail any confirmed investigation findings.

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