# Resources Safety and Health Newsflash

## Metal shard projectile from excavator track sprocket

## Purpose

*Draw attention to the occurrence of a serious incident(s) in the mining industry.*

*Increase Risk awareness.*

*Encourage mines to examine and check that their controls are adequate.*

## What happened?

Following an undercarriage track change on an excavator, a metal shard (refer Figure 1) was ejected from the track sprocket. The metal shard travelled 35 meters (refer Figure 2) breaking a side window and entering the cabin of a parked service truck.

In this incident, the metal shard ejected in line with the track frame; however, metal shards may be ejected at any angle from the tracks. Whilst no injuries were reported on this occasion, coal mine workers have suffered serious injuries from flying metal shards in cases reported to the Mines Inspectorate. The track sprocket was a refurbished sprocket and not an original OEM sprocket.

**Figure 1**

**Figure 2**

## Site senior executives should

- Ensure that OEMs or service providers provide all replacement components that are fit for purpose. This includes confirmation and documentation of component refurbishment processes, quality control checks and engineering certification of components including tracks sprockets and idlers.
- Review risk assessments for track maintenance and consider enforcing a 360-degree exclusion zone around excavators when track maintenance is in progress. In particular, consider the radius of the exclusion zone.
- Ensure that suitable ballistic protective equipment is available to spotters required by maintenance procedures.
- Consult with the OEMs or service providers to ensure that the correct track maintenance procedures are available.

Investigations are ongoing and further information may be published as it becomes available. The information contained in this publication is based on knowledge and understanding at the time of writing.

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**12 June 2020**

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