

Queensland Mines Inspectorate preliminary observations: North Goonyella High Potential Incident

On 1 September 2018, all coal mine workers were withdrawn from the underground workings at North Goonyella coal mine as a precautionary measure in response to rising methane levels at the longwall. In the hours that followed, the mine's spontaneous combustion triggers were reached, escalating the level of risk.

The inspectorate started gathering relevant information in November 2018 and formally commenced its investigation in January 2019, after the site was stabilised. The scope of the investigation is to analyse events leading up to this high potential incident, which resulted in the withdrawal of workers.

The first 3 months of the investigation involved gathering mine documents and requesting further data where gaps were identified.

To date, the mines inspectorate has reviewed over 11,370 files, including ventilation records, gas data and the mine's safety and health management system, including relevant trigger action response plans (TARPs). A TARP is a tool which sets minimum actions required by mines to respond to defined "triggers" – events which cause deviation from normal mine conditions. Failure to adhere to TARPs can lead to escalation of the level of risk without adequate controls being implemented.

At this time, persons of interest have exercised their right under the *Coal Mining Safety and Health Act 1999* not to be interviewed by the inspectorate unless compelled by law to do so. As such, no interviews have been conducted yet.

The mines inspectorate investigation is ongoing. However, the following preliminary observations may be relevant to the nature and cause of the incident:

- Review of the mine's records suggest that gas trends were not given sufficient consideration. This may have impacted the way in which TARPs were applied and actioned.
- Some key reports relating to the mine's ventilation plan, gas alarm system and explosion risk zone controls do not appear to have been reviewed or countersigned by key personnel, as required under the mine's safety and health management system.
- There is evidence that some boreholes located deep within the 9N goaf region were insufficiently sealed, allowing ingress of oxygen into active goaves, with the potential to escalate conditions for spontaneous combustion.
- There is evidence to suggest that the gas drainage system was being operated to focus on management of methane instead of the potential spontaneous heating event that was occurring underground.
- There is evidence to suggest the mine did not follow its own procedures relating to major ventilation changes.

These are preliminary observations and not conclusive findings. As the mines inspectorate's investigation continues, we will review these, and other matters arising, in finalising the investigation.