

June 2022 Incident Periodical

Recent High Potential Incidents**
Learnings and Recommendations
Communications and Safety Notices
Queensland Coal Mines Inspectorate

*** Selection of the 120 HPIs
reported during the period*

Coal Inspectorate



Resources Safety & Health
Queensland

1. Incident – strangler valve failed to shut down engine

- An explosion protected diesel engine system failed to shut down during a maintenance test undertaken to confirm the effectiveness of the engine strangler valve.
- Subsequent testing of other explosion protected diesel engine systems on site identified three more strangler valves that failed to shut machines down.
- Investigations identified that the strangler butterfly valve was not sealing and restricting air entering the engine due to a groove worn into the housing caused by the butterfly having preload/zero end float against the strangler housing.



Recommendations

- Review the maintenance strategy for explosion protected diesel engine systems.
- Review the equipment introduction to site process to ensure effectiveness of engine strangler valves.
- Ensure that engine strangler valves will effectively shut down the engine, independently of the fuel shut off system.

Site Senior Executive



- Communicate to maintainers the updated requirements of the explosion protected diesel engine maintenance strategy review.
- Ensure explosion protected diesel engine maintenance activities are conducted in compliance with the maintenance strategy.

Supervisors



- Ensure that you are familiar with the maintenance strategy updates
- Carry out maintenance activities / work accordance with the maintenance strategy.

Coal Mine Workers



2. Incident – Dozer contacted Dragline - Surface Mine

- Operator of Dozer was pushing a roll and tidying pad next to Dragline. Dragline was filling bucket out of dummy key to then swing and dump to the west of their location. Dozer operator has made a push adjacent to machine whilst bucket is still being filled and has contacted the dragline catwalk.
- Dragline has then swung, dumped the bucket and returned to fill again and then shut down as the dozer operator signaled to stop.
- There have been 22 reported HPis between 2017 and 2021 involving interactions between draglines and vehicles / machinery.



Recommendations

- Implement higher level controls, over and above positive communications, that ensure inadvertent contact between draglines and machinery, and / or personnel does not occur.
- Ensure “No Go Zones” are defined and clearly delineated.
- Ensure compliance with procedures regarding personnel and equipment entering areas where they may be struck by operating equipment are adequate and effective.

Site Senior Executive



- Should ensure compliance with procedures and processes. This includes conducting behavioural observations during dragline operations.

Supervisors



- Carry out their activities and work in a way that does not expose themselves or someone else to an unacceptable level of risk.
- Must follow site procedures and work instructions.
- If in doubt “STOP” outside of the “No Go Zone”

Coal Mine Workers



3. Incident – Three Dozer rollovers – Surface Mine

1. Dozer working on a rehabilitation contour drain has trammed onto a rock while compacting the batter. The operator has exited the cab and proceeded to discuss recovery options with their supervisor. Approximately 10 minutes later the dozer tipped onto its side before it could be recovered.
2. Dozer was preparing pad/bench for Excavator whilst reversing back (slight angle) the Dozer has trammed over rill and rolled over.
3. Dozer was slot pushing and whilst reversing up the slot has slid and rolled into adjacent slot, coming to rest on the right hand side of the dozer.

Incident 1



Incident 2



Incident 3

Recommendations

- Ensure that adequate procedures are in place for managing the work environment.
- Ensure that Supervisors are competent in assessing the risks and hazards associated with the work environment under their control.
- Ensure that contour bank designs and construction provide for a safe working environment.
- Ensure that adequate procedures are in place for dozer operations.

Site Senior Executive



- During work area inspections, ensure all potential hazards have been identified by coal mine workers.
- Do not allow work to start / continue until those hazards are being effectively controlled.
- Ensure that contour banks construction provide for a safe working environment.
- Ensure that dozer operators are familiar with dozer operation procedures.

Supervisors



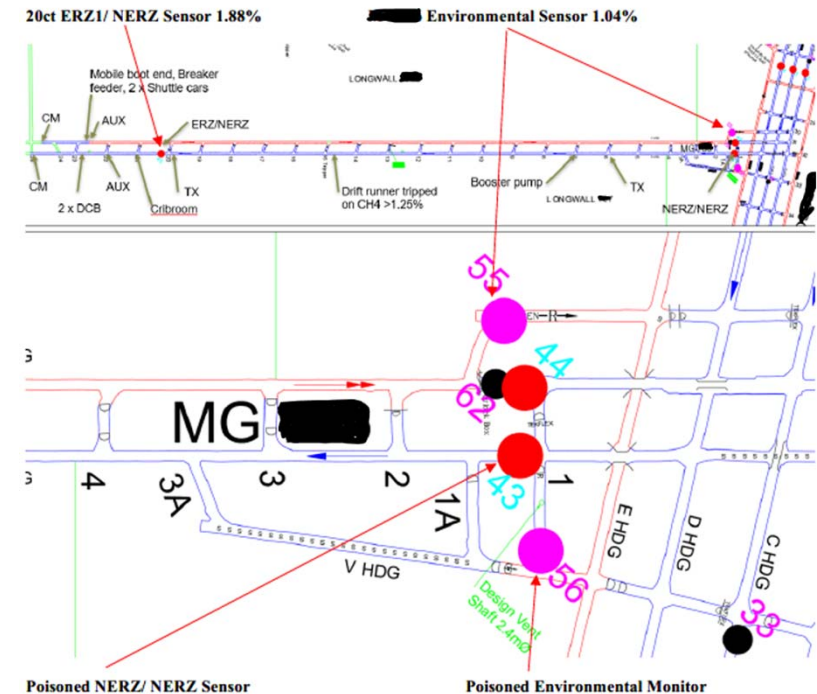
- Inspect your work area for potential hazards before conducting work.
- Ensure that all hazards are identified and effective controls have been put in place to manage these.
- Cease work immediately if you believe a hazard is not being adequately controlled.
- Inform your supervisor of any concerns about the work environment.
- Comply with dozer operation procedures.

Coal Mine Workers



4. Incident – Gas exceedance – Underground Mine

- Whilst grouting the liners for a shaft the balloon has failed falling into the shaft pushing a plug of gas through the outbye and production district.
- NERZ/NERZ boundary sensor at 1-2ct was poisoned due to greater than 5% CH₄ passing over it.
- Approximately 300 000L of methane travelled through the panel.



Recommendations

- Ensure relevant cross section of the workforce and technical experts are included in the risk assessment process.

Site Senior Executive



- Ensure that reviews of high risk tasks are carried out to verify that risk mitigation methods are appropriate.

Underground Mine Manager



- Ensure that controls are followed as prescribed in the risk assessment process.

ERZ controller



Communications from the Coal Mines Inspectorate

[Letter from the CICM to OCEs on the Certificate of proficiency in Mine Gases and Gas Testing](#)

[Letter from the CICM - Ventilation Officer Certificate of Competency Requirements](#)

[Letter from the CICM – Implementation of Bol Recommendations](#)

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