

*Oaths Act 1867***Statutory Declaration****QUEENSLAND****TO WIT**

I, Peter Antony Newman, of [REDACTED], in the State of Queensland, do solemnly and sincerely declare that:

1. In accordance with part 12 of the *Coal Mining Safety and Health Act 1999* (the Act) the Board of Inquiry is to inquire into 40 high potential incidents (HPI's) involving exceedances of methane (>2.5%) in and around the longwall (gas exceedances) reported to the Inspectorate between 1 July 2019 and 5 May 2020.
2. The purpose of this statement is to detail the changes the Inspectorate already plans to implement in relation to its handling of HPI's, in the immediate and medium term. It has been recognised, including from the learnings of the June 2019 report published by the Inspectorate "*Methane Management in Underground Coal Mines; Best practice and Recommendations*" (The Inspectorates' June 2019 Report), and to consolidate and implement the learnings from Dr Sean Brady's "*Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019*" (the Brady Report), that there needs to be further prioritisation of the investigation of HPI's by the Inspectorate particularly in relation to gas exceedances.
3. The proposed changes are to be proactively implemented with planning of same commencing shortly after the learnings from the Inspectorate's June 2019 report into gas exceedances and then the receipt of the Brady report.

My appointment as Chief Inspector of Coal Mines

4. I have a Bachelor of Science (BSc) Engineering – Mining Engineering, with Honours from Imperial College London.

5. After more than 40 years' of experience in underground and open cut mines in both coal and metalliferous operations, I was appointed to the position of Chief Inspector of Coal Mines, Department of Natural Resources, Mines and Energy in November 2019.

The Inspectors

6. The Inspectorate currently comprises of 25 inspectors who have come from a mechanical, electrical, occupational hygiene or mining background. In financial year ending 2020 the Inspectorate received funding to engage eleven inspectors to assist in carrying out the important statutory functions of the Inspectorate. To date, eight inspectors have been appointed and a recruitment process is underway in relation to three further inspectors. This will increase the total inspectors to 28.
7. The additional resources will assist in easing the workload of the current inspectors and also, importantly, further enhance the performance of the statutory functions of the Inspectorate.
8. Serious accident investigations in mining are typically very complex and intensive. As was noted in the Brady Report, at page 23, the Nature and Cause reports produced by the inspectors are comprehensive and of good quality. This is obviously resource intensive but the comprehensive and high quality output balances any resourcing considerations and this will continue as a necessary focus.
9. To ensure that the Inspectorate continues to be proactive rather than reactive, it was recognised that further resourcing was required in order to prioritise any required investigation of the numerous HPI's notified to the Inspectorate. The resourcing in 2020 will enable further prioritisation of this important statutory function of the inspectors.

Notification of HPI's for gas exceedances

10. Under the Act and the *Coal Mining Safety and Health Regulation 2017* (Regulation), if part of an underground coal mine required to be ventilated has a general body concentration of methane equal to or greater than 2.5% then the underground mine, or part thereof is considered dangerous and workers must be withdrawn from the mine or part thereof. Such an event is required to be notified to an inspector, and the mine is

required to investigate the HPI and prepare a report. Although the mine is required to notify an inspector of the HPI, immediately and in writing within 48 hours, the mine is not required to forward its investigation report. However, it is required to provide a report in the form of a Form 5A report within a month of the event. This report must outline the corrective steps taken by the mine to prevent a reoccurrence.

Previous compliance audit of gas exceedance HPI's and other reforms

11. In June 2019, the Inspectorate published The Inspectorates' June 2019 report. The Inspectorate had completed a series of compliance audits and requested methane gas monitoring data from eight longwall mines so that a detailed analysis could be undertaken. The analysis of methane monitoring data from 1 July 2016 to 30 June 2018 revealed a total of 759 gas exceedances, of which only 126 were reported (126 reported, and 633 unreported). In February 2017, the then Chief Inspector of Mines issued a letter to all underground Site Senior Executives (SSEs) and underground mine managers (UMMs) advising them that if a roadway in a mine contains an atmosphere where the methane concentration is equal to or greater than 2.5% it is taken to be dangerous under section 366 of the Regulation. As such, every occasion when methane is found in mine roadways required to be ventilated under regulation at a general body concentration of 2.5% or greater, must be reported as a HPI.
12. As a result of those methane exceedances, the Inspectorate issued several directives and substandard conditions or practices notices (SCPs), and initiated gas management audits focused on methane management. Ultimately, the Inspectorates' June 2019 Report included a number of recommendations including within the categories of engineering controls, trigger action response plans, gas monitoring systems, tube bundle detectors, real time and transportable detectors, and maintenance of detectors.
13. Statutory amendments to the Regulation were sought and enacted in the *Coal Mining Safety and Health (Methane Monitoring and Ventilation Systems) Amendment Regulation 2019*. This legislation significantly strengthened the requirements that mines must meet with regards to methane monitoring and ventilation.
14. The Brady report was tabled in Queensland Parliament on 6 February 2020 (ref no 197).



15. The *Resources Safety and Health Queensland Bill 2019* passed in Queensland Parliament on the 17 March 2020. The new regulatory authority, Resources Safety and Health Queensland, commences on 1 July 2020 as a separate body.

The balancing considerations for the Inspectorate relevant to HPI reporting

16. Collective analysis of gas exceedance HPIs was undertaken for the preparation of the The Inspectorates' June 2019 Report. However, that report does not capture the period being considered by the Board of Inquiry. The Board of Inquiry is now investigating 40 HPIs relating to gas exceedances reported to the Inspectorate between 1 July 2019 and 5 May 2020.
17. The Brady Report acknowledges that encouraging incident reporting cannot at the same time treat the number of such reports as a performance indicator to be driven downwards.¹
18. I also acknowledge and agree with the force of the comments in the Brady Report to the effect that one of the core aspects of a High Reliability Organisation (HRO) is that it considers a safety culture to be a reporting culture (page 68).
19. I agree that HPIs are one of the most useful and practical early warning systems available to industry, and that it is necessary for the reporting of HPIs to be encouraged.²
20. I am in full agreement, as per the Brady report, that the Regulator needs to encourage the reporting of HPI's, to be followed by the analysis of these incidents and the dissemination of the findings to the industry at large.³
21. The Brady Report analyses the appropriate selection of a Safety Indicator. In the Brady Report, it is opined that "*serious accidents can be selected as the safety indicator*", and provides cogent reasons for selecting the serious accident frequency rate as a safety indicator.⁴ Further, I acknowledge that there is significant force in the Brady Report's comments that the "*honest and accurate reporting of HPI's by the wider industry, and*

¹ Page 72 of the Brady Report

² Page 69 of the Brady Report

³ Page 73 of the Brady Report

⁴ Page 72 of the Brady Report

*the encouragement to do so, should be of paramount importance... hazards (incidents) that are identified, reported and controlled / removed are no longer present to cause harm at a later date.”*⁵ The Regulator should not do anything that encourages driving down HPI reporting.⁶

22. I also agree that, as per footnote 130 of the Brady report, Regulators should identify HPI's that they consider of critical importance for safety in the industry and consider defining them specifically. I acknowledge that HPI's that have a general body concentration of methane of at least 2.5% are of critical importance, and the legislation already states that such HPI's are taken to be dangerous such as to trigger withdrawal from the mine or part thereof.
23. It is recognised, as per the recommendations in the Brady report, that there needs to be a greater focus on analysis and active use of gas exceedance HPIs to remove hazards before they do harm.⁷ Further, the ideal is for the Inspectorate, as regulator, to have teams with the appropriate competencies whose *sole job* is to actively explore what is leading to incidents. However, as recognised in the Brady Report, this will come at both a financial and intellectual cost.⁸
24. A necessarily significant focus of inspectors is on the investigation of serious accidents, particularly given the necessity for investigations to be concluded promptly given statutory restraints in time limits for commencing prosecutions.
25. I acknowledge that there needs to be a further prioritisation of gas exceedance HPIs including trend analysis to determine whether gas exceedances are adequately under control, with both individual and collective consideration of such notifications. I acknowledge that the Regulator should continue to play a key role in collating, analysing, identifying and proactively disseminating the lessons learnt from data it collects from the industry.⁹

⁵ Page 73 of the Brady Report

⁶ Page 73 of the Brady Report

⁷ Page 69 of the Brady Report

⁸ Page 70 of the Brady Report

⁹ Page iv, recommendation 7 of the Brady Report

Changes to HPI Reporting, recording, analysis and investigation process to be implemented by Inspectorate

26. A three stage process for changes to HPI reporting, recording, analysis and investigation is to be implemented.

Stage One

27. Whilst many of the below actions already occur, there will be a streamlined process to ensure that the following must occur for each HPI reported to the Inspectorate (to be implemented in the financial year 2020- 2021 (FY'21)):
- a) Form 1A HPI Notification (Form submitted to the Inspectorate by the mine following the verbal HPI notification) received by Inspector and details recorded and entered into Lotus Notes database. Access to the Lotus Notes developer is scheduled for 16 July 2020 to allow any necessary changes including that the review actions of the Inspector must be inputted into the system;
 - b) Where the inspector who receives the notification has sufficient technical and operational knowledge of the subject matter for the HPI¹⁰, that inspector will manage the Inspectorate's response to the HPI, including:
 - i. Recording details of the notification, securing of the scene if required, and the controls proposed by the mine.
 - ii. The consideration of the controls proposed by the mine, and either acceptance of the proposed controls, or determining the immediate actions required to respond to the HPI notification.
 - iii. Considering the findings from the site investigation on the Form 5A (the form that must be submitted by the mine at most one month after the HPI notification).

¹⁰ This nearly always occurs in any event but the exception is when a HPI notification occurs over a weekend and the inspector "on call" is of a different discipline to the HPI being notified.

- iv. Reviewing previous HPI's from site, outcomes of investigations, and discussion with Regional Inspector to determine if a follow up site investigation is required.
 - v. Where an inspector's site investigation is required, the Regional Inspector will allocate an inspector to the follow up investigation, and record action in the Weekly Regional Update Meeting minutes and the investigation log.
 - vi. Where it is determined that the actions contained in the Form 5A are adequate, and there is no trend of repeated HPI's, a file note is to be recorded in Lotus Notes by the nominated inspector.
 - vii. If follow up action is required, a file note in Lotus Notes will detail the actions required.
- c) If the inspector who receives the notification does not have the technical or operational knowledge of the subject matter for the HPI, the inspector will in the first instance record the details of the notification, secure the scene if required, input the details of the incident into Lotus Notes and review the controls proposed by the mine. Within 48 hours where required they will refer the matter to a subject expert inspector, or regional inspector who will allocate the HPI to an appropriate nominated inspector (to be listed as specialist for all Principal Hazards, e.g. Gas, ventilation, Strata Control, Explosives, Underground, Open Cut), who will then follow up with contacting the mine and manage the Inspectorates' response to the HPI, including:
- i. Recording any further details of the notification and the controls proposed by the mine.
 - ii. The consideration of the controls proposed by the mine, and either acceptance of the proposed controls, or determining the immediate actions required to respond to the HPI notification
 - iii. Considering the findings from the site investigation on the Form 5A.

- iv. Reviewing previous HPI's from site, outcomes of investigations, and discussion with Regional Inspector to determine if a follow up site investigation is required.
 - v. Where an inspector's site investigation is required, the nominated inspector will follow up the investigation, and record action in the Weekly Regional Update Meeting minutes and the investigation log.
 - vi. Where it is determined that the actions contained in the Form 5A are adequate, and there is no trend of repeated HPI's, a file note is to be recorded in lotus notes by the nominated inspector.
 - vii. If follow up action is required, a file note in Lotus Notes will detail the actions required.
- d) All HPI's requiring follow up investigation are to be referred to the Deputy Chief Inspector of Coal Mines, and the Chief Inspector of Coal Mines through the Weekly Investigation log, and by way of email alert.
 - e) Prior to undertaking a mine inspection, Inspectors are to review all HPIs that have occurred since the last inspection in their specialised discipline (Mining, Mechanical, Electrical, Occupational Hygiene), and review all previous mine record entries (MRE's), and validate that relevant controls outlined in the form 5A report have been implemented at the mine. The MRE is to include the results of the follow up inspection together with any Directive where the controls have been found not to have been implemented.

Stage Two

28. Medium term changes to be implemented in the third quarter of the Financial year 2021-2022 (FY' 21):
- a. The establishment of a Central Assessment Unit, (responsible for reporting, triaging, analytics, assessment and industry reporting) in financial year FY'21 as per the recommendations in the Brady Report, including
 - i. A single point for the reporting of HPI's.

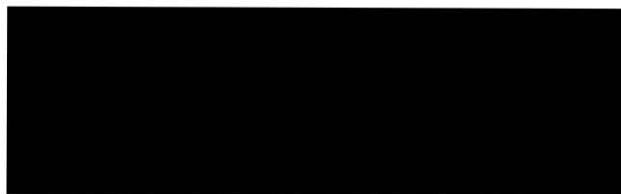


- ii. A dedicated team of specialised inspectors (mining, mechanical and electrical) to triage HPI's and allocated to Regional Inspectors for follow up where required.
- iii. A new Incident reporting and management system (budgeted in FY'21 and under development for delivery in the 3rd quarter of FY'21).
- iv. Reporting learnings back to the industry and the regulator.

Stage Three

- 29. Longer term changes to be implemented starting in the fourth quarter of the FY'21 and into FY'22:
 - a. The establishment of the Serious Accident Investigation Unit, including:
 - i. Specialised Inspectors and Investigation Officer to investigate all fatality and defined serious accidents;
 - ii. A single point of contact for Serious Accidents;
 - b. Regional inspectors will continue to manage HPI investigations as per Stage One and Two actions.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the *Oaths Act 1867*.



Signature of declarant/deponent

Taken and declared before me at Brisbane this twenty-fourth day of June 2020



A Justice of the Peace/Commissioner

for Declarations



