



Oaths Act 1867

Statutory Declaration

QUEENSLAND

TO WIT

I, Stephen Donald Smith, do solemnly and sincerely declare that:

1. My full name is Stephen Donald Smith. I reside at an address known to Resources Safety and Health Queensland (**RSHQ**).
2. I am employed by RSHQ. I am the Regional Inspector of Coal Mines, North region. The North region office is located in Mackay. As a general rule the Mackay office regulates the mines on the northern side of the Middlemount to Capella road, while those on the south are regulated by the Central region office in Rockhampton. The exceptions to this are that Grasstree Mine, which is to the south of the Middlemount-Capella road, is regulated by the Mackay office and Middlemount Mine is regulated by Rockhampton, even though it is to the north of the Middlemount-Capella road.
3. In total the North region office is responsible for regulating 25 active mines, five underground and 20 surface mines. An additional seven mines are on care and maintenance. This means they are not actively mining and selling coal at the moment, but we still maintain a relationship with them and will inspect their site once or twice a year.
4. Underground coal mines and open-cut coal mines operate completely differently. While some of the challenges they face are similar, the major risks or hazards faced by the two types of mines are different. The mine site environment is a complex one involving multiple levels of interactions between hazards, individuals, safety and control measures and other factors that all need to be managed to reduce risks on site to an acceptable level.
5. This statement addresses the High Potential Incident's (**HPIs**) subject to the Terms of Reference of the Coal Mining Board of Inquiry relating to the three mines- Oaky North Mine, Moranbah North Mine and Grasstree Mine.

Background, qualifications and role

6. I have close to 40 years' experience working in the mining industry. I graduated from the University of New South Wales with a degree in mining engineering in 1981. Since that time I have worked at underground coal mines that used pillar extraction and longwall mining methods and at surface coal mines that used truck and shovel and dragline mining methods.
7. I commenced work as a graduate mining engineer in 1982 in the New South Wales Hunter Valley, working for Coal and Allied. I worked as a mining engineer until 1987. I obtained my Undermanager's certificate of competency, which is sometimes called a second-class ticket, in 1987. I began working as Undermanager at an underground coal mine for Coal and Allied in 1987.
8. In 1989 I moved to an open cut mine, Bayswater Colliery, as a Mining Engineer and qualified as an Open Cut Mine Examiner and an Open Cut Mine Manager. I worked there until 1996 then moved to Wambo Open Cut Mine where I was employed as an Open Cut Mine Manager until June 2000. At that time I stopped working directly for mining companies, but continued to work within the coal industry for service providers.
9. In 2006 I returned to a direct role within industry and worked as an Undermanager at Glennies Creek underground mine until 2009. I then moved to work for Glencore as an Undermanager at Ravensworth North underground mine.
10. I left that role in 2013 and moved to Western Australia to work as an Inspector of Mines within the Western Australian mining regulator. I moved to Queensland in 2017 and commenced employment with the Inspectorate as an Inspector of Mines (**IOM**).
11. In July 2019 I was appointed as the Regional Inspector North region. Due to other personnel changes within the Inspectorate I took up the role of Acting Deputy Chief Inspector from August 2019 until November 2019. I returned to my current role as Regional Inspector in November 2019.
12. I am currently responsible for 10 inspectors and three administrative staff, all based out of the Mackay office. My IOMs come from a range of different disciplines, including mining (4 IOMs), mechanical (2 IOMs), electrical (2 IOMs) and occupational health and hygiene (2 IOMs).
13. I am on the roster with the rest of the IOMs as weekend duty officer. This is in addition to my other obligations as a Regional Inspector of Mines (**RIOM**). I will sometimes receive calls when a mine cannot reach another inspector on the phone and needs to report a HPI or a serious accident.

14. The Inspectorate holds a weekly meeting with all available inspectors on a Monday morning, which includes the RIOMs and when available, the Deputy and the Chief Inspector. The responsibility for leading the meeting is generally shared between myself and the RIOM for Central region. In addition to this meeting, we have weekly coal leadership meetings with the Chief, Deputy and the two RIOMs (where possible), and monthly leadership meetings as well.

Current process for reporting HPIs

15. As outlined, I spend time on call as the duty inspector and will take HPI notifications when they are made to me by the mines. I also oversee and work with the Inspectors who deal with the majority of the HPI notifications.
16. My role included oversight of the 14 HPI notifications that were received for exceedances of methane over 2.5% in and around the longwall at, Oaky North Mine, Grasstree Mine and Moranbah North Mine during the period 1 July 2019 to 5 May 2020 (**the relevant period**).
17. The current process for the reporting of a HPI to the Inspectorate involves the relevant mine being required to give notice of the HPI as soon as practicable. This is generally achieved at first instance by the mine telephoning an Inspector and notifying them of the HPI.
18. The initial verbal report will involve the relevant employee from the mine, generally the Underground Mine Manager, providing an explanation of the circumstances surrounding the exceedance. The Inspector has the opportunity to ask questions of the manager as to the context surrounding the HPI. For a methane exceedance, this might include questions about the location of the sensor reading showing the exceedance, where longwall equipment was, the position of the shearer, the performance of the ventilation systems, recent experience with the goaf and the relevant atmospheric pressure. These types of questions may be asked as they provide information that indicates whether the cause of the HPI is understood at the mine and, if so, whether the mine is taking the necessary steps to manage it.
19. During the verbal HPI notification most inspectors will make some notes about what they are told. The Inspectorate has a Mine Notifications book which many inspectors use, but others choose to use their diaries, paper or a notebook.
20. Following the initial verbal report, the mine is asked to provide the Inspectorate with a Form 1A, which sets out the features of the HPI in writing.
21. The Inspector that receives the HPI report, enters it into the Department's internal database, Lotus Notes.

22. Since November 2019, the Inspector forwards the HPI notifications to all the Inspectors, including the RIOMs, the Deputy Chief Inspector and Chief Inspector. This provides a mechanism for ensuring there is knowledge sharing amongst the Inspectorate. The HPIs' received on a weekend are also discussed at the weekly team meetings, which are held every Monday and attended by all of the available Inspectors. The HPIs received over the weekend are summarised at these meetings and if Inspectors wish to raise a particularly serious HPI, or discuss an investigation or issue at a mine, they are able to do so. In my experience, inspectors do raise issues that they wish to discuss at these meetings.
23. Prior to November 2019, while the notifications were not automatically sent to everyone in the Inspectorate, they were still often sent between inspectors and to the RIOMs, but it differed depending on which inspector was sending the notification out.
24. Following the verbal HPI notification process, a Form 5A should be received from the mine within a month after the HPI incident. The information on the Form 5A is entered into a database by the mine which is then sent to our administrative staff who enter it into Lotus Notes and forward it to the inspector who took the HPI notification.

HPIs during the relevant period

25. From November 2019, I received each of the HPI notifications when they were entered into the system by the relevant inspector.
26. I do not have a specific memory of each of the HPI notifications. However, I have since reviewed all of the Form 1As and Form 5As for the HPIs from the relevant period. These documents are available to all inspectors in Lotus Notes and as the RIOM with oversight of the inspectors throughout the relevant period I have considered them for the purpose of making this statement.

Oaky North Mine

27. I am aware that the Inspectorate received one HPI notification for a methane exceedance in and around the longwall tailgate at Oaky North Mine during the relevant period. The notification was received on 6 December 2019 and I have reviewed the Form 1A and Form 5A.
28. The Form 1A indicates the methane concentration had returned to 0.55% from a peak of 2.84%. The longwall had opened a stub roadway in the coal block at the tailgate. The stub created an extra path for the face ventilation into the tailgate return. This reduced the airflow over the tailgate drive and allowed the goaf stream to migrate towards it. The methane detectors on either or both the shearer and the tailgate drive tripped the supply of electricity at the correct settings. Brattice was erected along tailgate shields. Following

a second lesser exceedance of 2.14% on the shift the crew were instructed to erect a Sherwood curtain.

29. The Form 5A indicates ventilation control packages to be developed and implemented at the mine.

30. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:

- (a) This was a methane exceedance in and around the longwall tailgate with a clear explanation by the mine for why it had occurred;
- (b) The ignition sources were removed as designed and eliminated the risk of ignition;
- (c) The mine demonstrated an understanding of the reasons for the exceedance and what was required to appropriately manage risk in the future.

Further investigation and compliance action relevant to gas management

31. The Inspectorate has maintained a focus on gas management at Oaky North mine, both during the relevant period, and during the preceding period from January 2016 to June 2019 (**the preceding period**).

32. The following Mine Record Entries that I have reviewed indicate that during the relevant period Inspectors attended Oaky North mine on a number of occasions to conduct inspections, and engaged with mine workers both on-site and via correspondence, in relation to gas management:

- (a) 9 July 2019;
- (b) 23 September 2019;
- (c) 26 September 2019;
- (d) 15 October 2019; and
- (e) 11 March 2020.

33. During the preceding period the Mine Record Entries indicate that the inspectorate was similarly focussed on gas management.

34. The following Mine Record Entries that I have reviewed indicate that during the preceding period Inspectors attended Oaky North mine on a number of occasions to conduct inspections, and engaged with mine workers both on-site and via correspondence, in relation to gas management:

- (a) 14 June 2017;
- (b) 19 October 2017;

- (c) 29 May 2018;
- (d) 19 September 2018 (Inspectors Smith, Callinan and Poynter);
- (e) 19 September 2018 (Inspector Randolph);
- (f) 25 October 2018; and
- (g) 8 February 2019.

35. As a result of the Mine Record Entries on 19 September 2018 I issued a Directive in relation to the methane monitoring system for the electrical isolation safety mechanism at the longwall.

Moranbah North Mine

36. I am aware that the Inspectorate received one HPI notification for a methane exceedance in and around the longwall at Moranbah North Mine during the relevant period. The notification was received on 20 July 2019 and I have reviewed the Form 1A and Form 5A.
37. The Form 1A indicates that this exceedance occurred due to a concentration of methane at the tailgate drive. It appears floor emissions were contributing to the exceedance, along with a goaf flush, and the fact a goaf hole was not yet online, which reduced goaf gas extraction capacity. The goaf well was on standby, meaning the well was ready to be drawn from, however, the low methane content meant that the goaf hole could not be drawn from. A goaf well cannot operate if there is too much oxygen in the mix. If the methane is not extracted out through a borehole, it may report to the tailgate, which may well lead to exceedances. The electrical protection systems worked and the longwall was stopped when the tailgate drive sensor tripped electrical power.
38. The Form 5A indicates that a problem was found at the tailgate drive methane sensor.
39. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:
- (a) This was a methane exceedance in and around the longwall tailgate with a clear explanation by the mine for why it had occurred, namely that it was the result of physical events which occur during longwall mining described at [37] above;
 - (b) The ignition sources were removed as designed and eliminated the risk of ignition;
 - (c) The mine demonstrated an understanding of the reasons for the exceedance and what was required to appropriately manage risk in the future;

- (d) The Inspectorate had been out to the mine three days prior to the HPI (17 July 2019) and discussed "*Methane management in underground coal mines- Best Practice and recommendations*";¹ and
- (e) On a subsequent mine inspection on 17 September 2019 the Inspector commenced by reviewing methane exceedances between 26 April 2019 to 8 September 2019.²

Further investigation and compliance action relevant to gas management

- 40. The Inspectorate has maintained a focus on gas management at Moranbah North mine, during both the relevant period, and preceding period.
- 41. The following Mine Record Entries that I have reviewed indicate that during the relevant period Inspectors attended meetings, conducted site visits, and performed inspections at Moranbah North Mine for matters at least in part in relation to gas management :
 - (a) 17 July 2019;
 - (b) 30 August 2019;
 - (c) 17 September 2019;
 - (d) 28 January 2020;
 - (e) 19 February 2020;
 - (f) 4 March 2020; and
 - (g) 29 April 2020.
- 42. During the preceding period the Inspectorate was similarly focussed on gas management.
- 43. The following Mine Record Entries that I have reviewed indicate that during the preceding period Inspectors and Investigations Officers attended Moranbah North Mine on a number of occasions, for matters at least in part in relation to gas management:
 - (a) 31 August 2016;
 - (b) 18 September 2016;
 - (c) 7 December 2016 (Inspectors Dobson and Brown);
 - (d) 7 December 2016 (Inspector Gouldstone);
 - (e) 7 February 2017;
 - (f) 27 April 2017;
 - (g) 10 August 2017;

¹ Mine Record Entry, 17 July 2019 [RSH.002.167.0001]

² Mine Record Entry, 17 September 2019 [RSH.002.168.0001]

- (h) 12 September 2017;
- (i) 8 November 2017;
- (j) 12 December 2017;
- (k) 17 January 2018;
- (l) 26 April 2018;
- (m) 6 June 2018;
- (n) 1 August 2018;
- (o) 18 September 2018;
- (p) 27 November 2018;
- (q) 3 January 2019;
- (r) 25 January 2019;
- (s) 30 January 2019;
- (t) 6 February 2019; and
- (u) 30 April 2019.

44. Further to the foregoing Mine Record Entries, I note that a Substandard Condition or Practice notice was issued on 16 August 2017³ requiring the mine to review “*TARP1_Gas and Atmosphere Management*” which was followed by a Directive issued on 12 September 2017⁴ to the same effect.

Grasstree Mine

45. I am aware that the Inspectorate received twelve HPI notifications for methane exceedances in and around the longwall at Grasstree Mine during the relevant period.

28 July 2019

46. I have reviewed the Form 1A and Form 5A for this exceedance. There was a failure of the compressor venturi which was pivotal to the exceedance. The methane level diluted below 2% in the main returns, which is positive. There was a rise to 2.25% and then when the compressor failed the methane rose to 3%. In this instance, the compressor is part of the goaf drainage system and appears to be running a venturi. The Form 1A identifies the issue and how to fix it. After the venturi was fixed there were no further exceedances for three months.

³ RSH.002.323.0001

⁴ RSH.002.324.0001

47. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:

- (a) This was an incidence of methane exceedance where the cause was found to be an equipment failure;
- (b) The mine appeared to have an understanding of the reasons for the exceedance, had identified the cause and was able to describe (in the Form 1A) how they were going to fix the issue; and
- (c) Inspector Keith Brennan is recorded as reviewing LW909 methane exceedance at his next inspection on 15 August 2019.⁵

25 October 2019

48. I have reviewed the Form 1A and Form 5A for this exceedance. It occurred at the start of the new longwall 808. The exceedance was 2.76% in the tailgate after the first caving and goaf fall.

49. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:

- (a) This was an incidence of methane exceedance at the start of a new longwall with a clear explanation by the mine why it had occurred, namely that it was the result of a physical event which does occur during longwall mining called a goaf fall; and
- (b) The mine appeared to have an understanding of the reasons for the exceedance.

30 October 2019

50. I have reviewed the Form 1A and Form 5A for this exceedance. It reported a communication system failure within the mine which led to the goaf gas drainage system stopping. The Form 5A indicates a programming error.

51. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:

- (a) This was an incidence of methane exceedance where the cause was found to be an equipment failure due to a human error; and
- (b) The mine had clearly described how it was taking action to reduce the likelihood of the same human error occurring.

⁵ Mine Record Entry, 15 August 2019 [RSH.002.082.0001]

11 January 2020

52. I have reviewed the Form 1A and Form 5A for this exceedance and the information provided is that a goaf fall has occurred that has flushed gas out of the goaf which has led to the tailgate drive shutting off. There is a reference to the tailgate taking weight which is an indicator of an imminent goaf fall.
53. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:
- (a) This was a methane exceedance with a clear explanation about how it had occurred, namely that it was the result of a physical event which does occur during longwall mining called a goaf fall; and
 - (b) The ignition sources were removed as designed and eliminated the risk of ignition;
 - (c) The mine appeared to have an understanding of the reasons for the exceedance.

22 February 2020

54. I have reviewed the Form 1A and Form 5A for this exceedance. This exceedance, and a number of the exceedances that were measured in early 2020, are similar to those that occurred at another mine where the shield canopy sensor has measured an exceedance of methane, while the other tailgate sensors have not registered an exceedance.
55. On this occasion, it was noted that the shearer had left the tailgate and there was movement of the tailgate drive and shields. It is believed this allowed gas to be purged from the goaf behind the shields. In addition, a goaf drainage borehole was yet to become active, which has likely contributed to the methane increase.
56. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:
- (a) This was a methane exceedance detected on the canopy sensor of the longwall where the likely cause was relatively clear, namely that it was caused by particular physical events which occur during longwall mining known as shield and AFC advance;
 - (b) The ignition sources were removed as designed and eliminated the risk of ignition;
 - (c) There was a goaf drainage borehole which at the time of the incident had not yet come online, but which, upon coming online, should reduce the risk of a further exceedance;
 - (d) Apart from the canopy sensor, no other sensors registered an exceedance; and
 - (e) There was nothing in the material to indicate that there was an emergent need for the mine to rearrange its process when advancing the tailgate drive or moving the shearer.

20 March 2020 x 3 HPIs

57. I have reviewed the Form 1As and Form 5As for these exceedances. Two of them were reported to Inspector Brennan and one to Inspector Brown. By this stage there has been a recognition of the canopy sensor issue at another mine and as Grasstree mine is also owned by Anglo, I had started asking the same questions at all of their mines.
58. All three of these Form 1As involved an exceedance at the shield canopy sensor, but not at the inbye and outbye tailgate sensors. The information contained within the forms was similar, but I am aware that Inspector Brown asked some follow up questions of the mine, both by phone and by email. I was copied to some of these communications.⁶ As a result of his queries, the mine undertook further investigations and identified that there was a goaf gas issue between shields 195-197, and there had been a staggering of the shields affecting the airflow in such a fashion that it contributed to the goaf gas coming from behind the shields.
59. Based on my review of the Form 1As and Form 5As the combination of the following factors are relevant:
- (a) These incidents were methane exceedances detected on the canopy sensor of the longwall tailgate shield, where the likely cause was made relatively clear to be the result of particular physical events which occur during longwall mining known as shield and AFC advance;
 - (b) The ignition sources were removed before each exceedance as designed and eliminated the risk of ignition;
 - (c) Further investigations were carried out by the mine at the behest of Inspector Brown;
 - (d) As with the 22 February 2020 HPI, there was a goaf drainage borehole which at the time of the incident had not yet come online, but which, upon coming online, should have reduce the risk of a further exceedance;
 - (e) Apart from the canopy sensor, no other sensors registered an exceedance; and
 - (f) Following the further investigations, the mine demonstrated a good understanding of the causes of the exceedances, which included human error.

24 and 25 March 2020

60. I have reviewed the Form 1As and Form 5As for these exceedances and it is apparent that similar issues are revealed as occurred on 20 March 2020. There is a recognition within the Form 1As that there needs to be changes to the automation of the tailgate shields to ensure batching does not occur, and there need to be crew talks to include

⁶ RSH.002.059.0001, RSH.002.061.0001 and RSH.002.060.0001

awareness of these issues and how to advance shields without causing a methane exceedance.

61. The Form 1As reveal that the mine site is aware of what has caused the exceedances in these instances, they have identified how they can resolve the issues and they have set out the steps to do so.
62. Based on my review of the Form 1As and Form 5As, the combination of the same factors existed as I have identified for the 20 March 2020 HPIs. Furthermore, in this instance:
 - (a) The mine had identified further future actions to mitigate the likelihood of repeat exceedances caused in the same way;
 - (b) As with the 22 February 2020 HPI, there was a goaf drainage borehole which at the time of the incident had not yet come online, but which, upon coming online, should reduce the risk of a further exceedance;
 - (c) Apart from the canopy sensor, no other sensors registered an exceedance; and
 - (d) Following the further investigations, the mine demonstrated a good understanding of the causes of the exceedances.

6 April 2020

63. I have reviewed the Form 1A and Form 5A for this exceedance. The tailgate strata was hanging back 8 metres at the start of the shift but fell in during this event and ended up flush with the tailgate shields. Additional brattice and ventilation devices had been knocked down during the goaf fall. A goaf borehole had failed to come online 8 metres beyond the face position and the shield positions had been staggered at the time of the goaf fall.
64. The exceedance caused an immediate trip of power, as required, and did not lead to exceedances on the tailgate drive or outbye tailgate monitors, indicating that the ventilation system had not become overwhelmed.
65. Based on my review of the Form 1A and Form 5A, the combination of the following factors are relevant:
 - (a) This was a methane exceedance with a clear explanation about how it had occurred, namely that it was caused by a physical event which does occur during longwall mining called a goaf fall;
 - (b) The ignition sources were removed as designed and eliminated the risk of ignition
 - (c) Apart from the canopy sensor, no other sensors registered an exceedance; and
 - (d) The mine appeared to have an understanding of the reasons for the exceedance.

11 April 2020

66. I have reviewed the Form 1A and Form 5A for this exceedance and the conditions appear to be similar to the previous exceedance, gas purging from the goaf due to a goaf fall. No exceedance was recorded on the TG drive sensor, nor the TG sensor further outbye. The mine identified actions to better control airflow at the tailgate drive in order to prevent a recurrence.
67. Based on my review of the Form 1A and Form 5A, the combination of the same factors as identified for the 6 April 2020 HPI existed, and furthermore:
- (a) In this instance the mine had identified future actions to mitigate the likelihood of repeat exceedances caused in the same way;
 - (b) This was a methane exceedance with a clear explanation about how it had occurred, namely that it was caused by a physical event which does occur during longwall mining called a goaf fall;
 - (c) The ignition sources were removed as designed and eliminated the risk of ignition;
 - (d) Apart from the canopy sensor, no other sensors registered an exceedance; and
 - (e) The mine appeared to have an understanding of the reasons for the exceedance.
68. I recall that after this HPI was reported, further investigations were undertaken identifying an issue with the mine's section 243A sensor (s243A *Coal Mining Safety and Health Regulation 2017*), which I have described in more detail at [80] to [88] below.

Grasstree HPIs generally

69. Eight of the Grasstree notifications were detected by a methane sensor in the canopy. These were the eight notifications received in February, March and April 2020. This sensor location is not a prescribed location for a methane sensor under the *Coal Mining Safety and Health Regulation 2017*.
70. Four of the twelve HPIs at Grasstree mine described in the foregoing paragraphs were found to have been caused by goaf falls. The goaf is supposed to fall in behind the longwall, and therefore 'goaf falls' occur as a matter of course during longwall mining. A longwall operator has very little location-specific control over how particular parts of a goaf might fall behind the longwall. Ordinarily, goaf falls do not result in exceedances. When they do, it is usually due to particular circumstances such as when the fall is larger than usual, when particular barometric conditions develop, or when the drainage systems are inhibited or inadequate. These circumstances can cause methane within the goaf to be pushed out, or drawn out, and over a sensor.

71. In circumstances where the mine has clearly identified the cause of an exceedance as a goaf fall, I would be particularly interested in information provided by the mine about:

- (a) The ventilation and drainage factors which may have contributed to the exceedance;
- (b) The location of the fall relative to the maingate and tailgate;
- (c) The particular sensor(s) that were triggered; and,
- (d) That the safety mechanisms designed to isolate potential ignition sources functioned properly.

72. Six of the twelve HPis at Grasstree mine described in the foregoing paragraphs were caused by movement of equipment at the face. The equipment at the face is designed to move along it, and therefore movement of the equipment occurs as a matter of course during longwall mining. Ordinarily, movement of equipment at the face will not cause an exceedance. Where it does, the exceedance is generally detected near the tailgate. It may be associated with a delay in the tailgate roadway falling in behind the longwall. Exceedances closer to the maingate thought to be caused by equipment movement are far less likely to occur, and would generally require additional enquiries, if the contributing factors are not satisfactorily identified by the mine.

73. Where the mine has clearly identified the cause of an exceedance to be equipment movement at the face, I would be particularly interested in information provided by the mine about:

- (a) The location of the exceedance relative to the maingate and tailgate;
- (b) The ventilation and drainage factors which may have contributed to the exceedance;
- (c) The particular sensor(s) that were triggered; and
- (d) Whether or not the electrical safety systems immediately isolated any potential ignition sources.

Further investigation and compliance action relevant to gas management

74. The inspectorate has maintained a focus on gas management at Grasstree mine, during both the relevant period, and preceding period.

75. The following Mine Record Entries that I have reviewed indicate that during the relevant period Inspectors attended Grasstree mine on a number of occasions to conduct inspections, and engaged with mine workers both on-site and via correspondence, in relation to gas management:

- (a) 15 August 2019;
- (b) 18 November 2019;

- (c) 19 November 2019;
- (d) 20 November 2019;
- (e) 25 November 2019;
- (f) 9 January 2020;
- (g) 16 January 2020;
- (h) 26 February 2020;
- (i) 27 February 2020;
- (j) 14 April 2020;
- (k) 14 April 2020 (#2);
- (l) 16 April 2020;
- (m) 16 April 2020; and
- (n) 1 May 2020.

76. As a result of the Mine Record Entries on 16 April 2020, I issued a Directive⁷ of even date in relation to the automatic methane detection at the longwall which suspended longwall operations until compliance.

77. Mine Record Entries from the preceding period also indicate that the Inspectorate was similarly focussed on gas management.

78. The following Mine Record Entries that I have reviewed indicate that during the preceding period Inspectors and Investigators attended Grasstree mine on a number of occasions to conduct inspections, and engaged with mine workers both on-site and via correspondence, in relation to gas management:

- (a) 5 April 2016;
- (b) 24 August 2016;
- (c) 18 October 2016;
- (d) 28 October 2016;
- (e) 8 November 2016;
- (f) 11 November 2016;
- (g) 18 November 2016;
- (h) 19 December 2016;

⁷ RSH.002.020.0001

- (i) 6 June 2017;
- (j) 16 June 2017;
- (k) 11 July 2017;
- (l) 18 July 2017;
- (m) 7 September 2017;
- (n) 29 November 2017;
- (o) 17 January 2018;
- (p) 6 February 2018;
- (q) 16 May 2018;
- (r) 17 May 2018;
- (s) 2 July 2018;
- (t) 14 August 2018;
- (u) 5 February 2019; and
- (v) 2 April 2019.

79. Further to the foregoing Mine Record Entries, I note that Directives were issued suspending longwall operations until compliance on both 18 October 2016⁸ and 16 June 2017.⁹

Section 243A sensor

80. On 20 March 2020, following an inspection the previous day at a different mine, I was part of a phone meeting with the Underground Mine Manager for that mine. Inspectors Malcolm Brownnett and Geoff Nugent were also present. I cannot recall all the details of the conversation, but I do recall there was a discussion about the methane exceedances and the sensors. Following the meeting I recall that Inspector Nugent said he believed, based on what had been said during the meeting, that that mine may have their section 243A sensor (s243A *Coal Mining Safety and Health Regulation* (2017)) in the wrong location.
81. This led to a process whereby I sought information from mines including, Grasstree and Moranbah North Mines as to where the section 243A methane sensors were located and how they were being managed.

⁸ RSH.002.298.0001

⁹ RSH.002.299.0001

82. On or around 1 April 2020 I spoke to the Underground Mine Manager at Grasstree and Moranbah North and asked them to provide me with an explanation of the location and functionality of their tailgate roadway sensors.
83. After a phone conversation, on 1 April 2020 at 1.58pm I sent an email¹⁰ to Michael Lerch, the Underground Mine Manager at Moranbah, seeking confirmation of my understanding of the location and functionality of the tailgate sensors planned for the next longwall at Moranbah. Mr Lerch replied on 2 April 2020 at 8.57am¹¹ clarifying that information.
84. Around this time, I also spoke to Kelvin Schiefelbein, the Underground Mine Manager at Grasstree and asked him to explain the functionality and location of the tailgate sensors in their longwall.
85. As a result of my inquiries, I believed I had evidence that confirmed that Grasstree mine had the sensor that was required pursuant to section 243A of the Regulations in the wrong location. It was clear the mine considered that a sensor located on the canopy shield at the tailgate met the requirements of section 243A of the Regulations.
86. The Inspectorate did not share the mine's view and, as a result, I issued a directive to Grasstree on 14 April 2020, requiring them to comply with section 243A of the Act. After further investigations into the situation at Grasstree I issued a further directive on 16 April 2020. The directive of 14 April 2020 was later withdrawn. No directives were issued to Moranbah North as the longwall was not in operation at the time.
87. Grasstree confirmed they had satisfied the requirements of the second directive I had issued on 16 April 2020. As far as I am aware, the mine elected to retain the canopy shield sensor, and they modified the settings of the tailgate sensor to trip the AFC and the shearer cutters at 2%, as required by section 243A of the Regulations.
88. The following MREs and Directives are relevant to the Grasstree 243A sensor
- (a) 14 April 2020;¹²
 - (b) 14 April 2020 (#2);¹³
 - (c) 16 April 2020;¹⁴
 - (d) 16 April 2020;¹⁵
 - (e) 16 April 2020;¹⁶ and

¹⁰ Email to Michael Lerch dated 1 April 2020 [RSH.002.055.0001]

¹¹ Email from Michael Lerch dated 2 April 2020 [RSH.002.056.0001]

¹² RSH.002.013.0001

¹³ RSH.002.012.0001

¹⁴ RSH.002.020.0001

¹⁵ RSH.002.021.0001

¹⁶ RHS.002.022.0001

(f) 1 May 2020.¹⁷

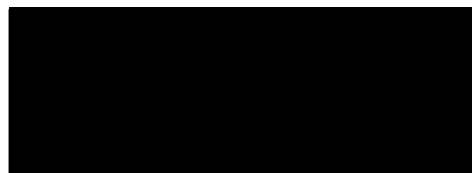
Reforms in light of the Brady Report

89. In 2019 DNRME commissioned a report (**the Brady Report**) by Dr Sean Brady to consider the fatality cycle within the mining industry and all deaths that had occurred since the introduction of the Act.

90. I am aware that the Brady Report was tabled in Parliament in February 2020.

91. I am aware that a number of changes are to occur within the Inspectorate in the short and medium term to implement learnings from the Brady report.

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 Mackay this 29th day of July 2020



A Justice of the Peace /
~~Commissioner for Declarations~~



¹⁷ RSH.002.023.0001