

Oaths Act 1867**STATUTORY DECLARATION****Queensland**

I, Luca Anthony Pantano of c/- Allens Lawyers, Level 26, 480 Queen Street, Brisbane in the state of Queensland do solemnly and sincerely declare as follows.

Position and Relevant Experience

- 1 I have been employed by Oaky Creek Coal Pty Ltd since March 2019.
- 2 I currently hold the position of Ventilation Officer at the Oaky North mine, and I held that position on 6 December 2019. The functions of a Ventilation Officer for an underground mine, prescribed by s 341 of the Coal Mining Safety and Health Regulation 2017 (*CMSHR*) are as follows:
 - (a) to ensure adequate ventilation of the mine;
 - (b) to ensure the mine's air quality is measured and recorded under s 362 *CMSHR*;
 - (c) to take charge of any ventilation system change in the mine by giving directions, or by being present, when the change is happening;
 - (d) to ensure all ventilation control devices at the mine are properly constructed and maintained.
- 3 I have been involved in the coal mining industry since in or around February 2011. The details of my previous roles within the coal mining industry are as follows:
 - (a) from 2011 to 2014, I was employed as a Mining Engineer by Oaky Creek Coal Pty Ltd. The relevant responsibilities of this role included:
 - (i) undertaking the graduate program;
 - (ii) delivering site specific project work; and
 - (iii) providing technical and operational support for the mine operations known as Oaky North Underground, Oaky No.1 Underground and Oaky Creek Surface ;
 - (b) from 2014 to 2016, I was employed as a Ventilation Officer by Newlands Coal Pty Ltd. The relevant responsibilities of this role are the functions prescribed by the *CMSHA* and *CMSHR* for a Ventilation Officer;
 - (c) from 2016 to 2019, I was employed as a Mining Engineer at Springvale coalmine . During that time, I also held the position of Ventilation Officer at Angus Place coalmine. I was employed by Centennial Coal Company Limited (or a subsidiary of it).
As a Mining Engineer at Springvale, my responsibilities included:
 - (i) undertaking geological and geotechnical mapping;
 - (ii) creating and auditing strata support plans; and
 - (iii) managing contractors throughout site specific projects.
 As the Ventilation Officer at Angus Place, my responsibilities included:
 - (iv) the requirement to control and manage the ventilation system and associated ventilation activities for the mine; and
 - (v) maintaining compliance with the standards set out in Ventilation Control Plan, Safety Management System, requirements of work health and safety law, relevant codes of practice and guidance material approved by the mine operator.

- 4 Other relevant experience I have obtained includes:
- (a) in 2015, I participated in a Mine Emergency Management System course facilitated by Queensland Mines Rescue Service;
 - (b) I participated as a team member in the 2016 Queensland Mines Rescue Cup, representing the Newlands coal mine;
 - (c) I participated as a team member in the 2018 NSW Western Region Mines Rescue Competition, representing Springvale coal mine; and
 - (d) I participated as a team member in the 2018 Australian Mines Rescue Competition, representing Springvale coal mine.
- 5 As at 6 December 2019, I held the following qualifications, which I continue to hold at the date of this statement:
- (a) in 2010, I obtained a Bachelor of Engineering from The University of Queensland;
 - (b) in 2013, I obtained a Certificate IV in Frontline Management from The Australian Retail College;
 - (c) in 2013, I obtained a Graduate Diploma in Mine Ventilation from The University of New South Wales, which includes a Ventilation Officer's certificate of currency required by s 61 Coal Mining Safety and Health Act 1999 (Qld) (*CMSHA*), which was current on 6 December 2019 and remains current at the date of this statement; and
 - (d) in 2018, I obtained a New South Wales Deputy of Underground Coal Mines Certificate of Competence from the NSW Government, Planning and Environment.
- 6 I am a member of:
- (a) Australian Institute of Mining and Metallurgy; and
 - (b) Queensland Mines Rescue Service Limited.

Statement regarding the incident

- 7 The following information is relevant to understand my account of the incident.
- (a) A 'methane trip' means that the level of methane detected in a part of the underground coal mine detected by the methane detector inside the mine exceeds the acceptable level programmed into the detector, which automatically halts production in the mine, by switching off power to the shearer and associated equipment operating underground.
 - (b) The methane sensors used at Oaky North mine are programmed to 'trip' and switch off power to the underground equipment when methane is detected at a concentration exceeding 1.25%. This programming is more conservative than the requirement that the sensor automatically trip the power when the methane level reaches 2%, pursuant to former s 244 CMSHR, which was current on 6 December 2019.
 - (c) The methane detector was installed in the location required for compliance with s244 of the CMSHR17 on the 6th December 2019.
 - (d) The longwall block where the incident occurred is described as LW 501. At that time, there was a blockside stub present on the tailgate side of the block. It is my opinion that the first methane exceedance occurred because the longwall shearer, cutting at the face, intersected with the end of the stub, opening up a ventilation pathway. This allowed the ventilation air to escape through the open stub passage, causing goaf stream gas to come forward and accumulate around the methane sensor on the tailgate drive.
 - (e) Refer to the documents described in paragraph 20, which explain the brattice wing and Sherwood curtain concepts.

- 8 On 6 December 2019, I was onsite at the Oaky North mine. I finished my shift at approximately 6pm and was in the main carpark when I received a phone call from Greg Cunliffe, the Control Room Operator (**Cunliffe**) telling me that a methane trip on the longwall tailgate drive had just occurred. I told Cunliffe that I would immediately come back onto the mine site and assess the situation.
- 9 I re-accessed the mine site shortly after 6pm and proceeded to the Control Room, where I made contact with Cunliffe and Robert Cady, the Shift Supervisor on duty (**Cady**) for an initial incident briefing.
- 10 I started to gather information about what had happened and also confirmed that the ventilation system was operating normally, by ensuring that the goaf plant (used to extract gas from the goaf to the surface) and main fans were continuing to operate.
- 11 After I had checked that the ventilation system was operating, Cady and I spoke to Gus Wilson (the Longwall ERZC on shift) (**Wilson**) on the phone, to gather further information and assess the situation. During this phone call, Wilson confirmed that he had commenced running a brattice screen (sometimes known as a Sherwin curtain) or was going to run a brattice screen along the longwall tailgate shields to ventilate the tailgate drive area. I considered this and told Wilson that I agreed with this methodology. I do not recall where I was when Cady and I spoke to Wilson.
- 12 After speaking to Wilson, Cady and I then spoke to Michael Downs, the Underground Mine Manager (**Downs**) on the phone to discuss the details of the incident. During that phone call Cady and I reported the current status of the incident and environmental conditions based on data available to us in the Control Room to Downs. We described to Downs the steps taken and to be taken in response to the incident, and recited to Downs the information to be gathered to complete the high potential incident notification required to be reported to the Mines Inspectorate.
- 13 I then called Wilson and explained the relevant environmental and ventilation arrangements including the requirement that the brattice across the tailgate shields was to be maintained until the 23ct stub could be mined out, and the requirement for Wilson to monitor the goaf stream and follow the applicable TARP.
- 14 I collated all the information about the incident that I had collected from data at that time and sent an email at 6:55pm to:
- (a) Bradley Watson, the Site Senior Executive (**Watson**);
 - (b) Downs;
 - (c) Michael Angel, the Technical Services Manager (**Angel**);
 - (d) Matthew Way, the Production Manager (**Way**);
 - (e) Cady; and
 - (f) Barry Brigden, another Shift Supervisor (**Brigden**).
- 15 I left the mine site at approximately 7pm, after spending approximately one hour onsite after first becoming aware of the incident as described in paragraph 8 of this statement.
- 16 My responsibilities as Ventilation Officer are not handed over at the end of my shift to another worker. I am contactable by phone at all times, even if I am offsite.
- 17 I received a phone call from Downs at approximately 9pm that night, who informed me that a second methane trip on the longwall tailgate drive had occurred. Downs told me that he had directed the oncoming nightshift crew to install a Sherwood curtain in accordance with STD0976OCN Longwall 501 Ventilation and Gas Standard.
- 18 On the 7 December 2019, I attended the mine site and performed a review of the gas environmental data and sent an email at 11:19am detailing trends along with commentary

regarding the low methane concentrations within the longwall tailgate to Watson, Downs, Angel, Way, Cady and Brigden.

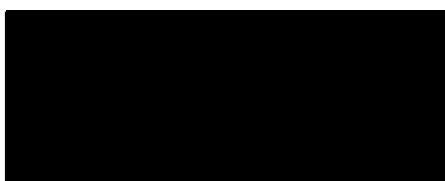
- 19 On the 8 December 2019, I performed a further review of the gas environmental data, along with information gathering in consultation with Rod Murray, the Longwall ERZC on shift (*Murray*). Murray and I explained to Murray and Brigden that the Sherwood curtain should be kept in place and extended forward until GDP31 produced good flows.
- 20 In responding to the incident onsite on 6 December, and in the subsequent days described, I consulted the following documents:
- (a) STD0976OCN Longwall 501 Ventilation and Gas Standard; and
 - (b) STD0222 Longwall frictional ignition, specifically with reference to the section containing standards for installation of TG brattice (Sherwin curtain) and the Sherwood curtain, for goafstream gas management.
- 21 Blockside stubs are not regularly encountered. As at 6 December 2019, I was aware of 2 previous occasions on which blockside stubs in LW 501 had been opened up. This had occurred without incident. I did not expect that holing into the blockside stub on this occasion would cause a methane related incident.

Subsequent actions taken to further improve safety

- 22 Since the incident, I have overseen the following improvements to policy and procedure to further improve the response to methane exceedances at Oaky North mine:
- (a) inclusion of mandatory installation of a Sherwood curtain when intersecting a blockside stub as a requirement contained in the permit to mine for the next two stubs in LW 501.
 - (b) inspection of the Sherwood curtain installation at the 11ct location against the existing standard contained in STD0976OCN Longwall 501 Ventilation and Gas Standard;
 - (c) the development of a work instruction for holing in to blockside stubs in consultation with two separate longwall crews, which is now contained in the current Safety Health Management System for Oaky North mine. However, given the directions referred to below, it is not expected that this instruction will be required in practice;
 - (d) to eliminate the methane hazard created by blockside stubs in the future:
 - (i) Watson has issued a direction to backfill blockside stubs that already exist on future designated longwall blocks before production reaches the blockside stubs; and
 - (ii) Watson has issued a direction that that further blockside stubs not be included on the mine plan for future longwall blocks, to avoid the recreation of the circumstances which created the gas exceedance at LW 501.

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

Signed and declared by the abovenamed declarant at Brisbane in the State of Queensland this *6th* day of August 2020



BEFORE ME: Claire Louise Watson (Solicitor)