



**Regional
NSW**

WHS undertaking

Undertaking to the Secretary,
Regional NSW
given for the purposes of Part 11 of the *Work Health and Safety Act 2011*

by

Springvale Coal Pty Ltd

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Purpose

The purpose of this WHS undertaking is to document the undertaking given to the **regulator**, the Secretary of Regional NSW, for the purposes of Part 11 of the *Work Health and Safety Act 2011 (WHS Act)* in connection with a matter relating to a contravention or alleged contravention by the person of the WHS Act.

Section A - general information

1. details of the company or individual proposing the undertaking

Name of company or individual	Springvale Coal Pty Ltd	
Registered address	[REDACTED]	
Mailing address (if different from above)	[REDACTED]	
Telephone	[REDACTED]	
Email address	[REDACTED]	
Legal structure	Australian proprietary company, limited by shares	
Type of business	Coal mine operator of the Springvale Colliery	
Commencement date of the entity	20 May 1991	
Workers	Full time: 413	Part time: 0
Products and services	Coal	
Comments	[REDACTED]	

2. the details of the alleged contravention

It is alleged that on 5 February 2019 Springvale Coal Pty Ltd (**Springvale Coal**), being a person conducting a business or undertaking at the Springvale Colliery at Springvale, NSW (the **Mine**), failed to discharge its obligations under section 19(1) of the *Work Health and Safety Act 2011 (NSW) (WHS Act)* to ensure, so far as is reasonably practicable, the health and safety of workers at the Mine while the workers were at work in the business or undertaking conducted by Springvale Coal.

3. details of the events surrounding the alleged contravention, e.g. incident details

On 5 February 2019, three Springvale Coal Multi Skilled Mine Operators (**operators**) were working at longwall 425 panel attempting to free an armoured faced conveyor (**AFC**) chain that was jammed in the AFC.

The longwall and AFC are key operational plant at the Mine. Operators are required to follow the OEM recommended procedures to resolve issues with the longwall and AFC. It is in accordance with the OEM recommended procedures that any blockages on the AFC are cleared using the slow runner devices located at the main gate and tail gate.

The Mine followed the OEM recommended procedures that required it to use the slow runners at the tail gate and main gate of the AFC to free any component that may have become caught in the AFC. However, because the slow runner at the tail gate of the AFC was not operational and the slow runner at the main gate of the AFC did not have sufficient power to move the AFC chain alone, the workers developed an alternative system to free the AFC chain.

The system developed by the workers involved assembling towing equipment and attaching it to the rud link of the shearer. The towing equipment utilised included approved and authorised slings. Once the

WHS undertaking

towing equipment was assembled and attached to the shearer's rud link, the workers then began to move the AFC chain by simultaneously powering the slow runner at the main gate of the AFC and the shearer.

Shortly after starting the task, the rud link on the shearer failed, resulting in a sudden release of energy in the towing equipment (**Incident**). As a result of the Incident, an operator was struck in the right ankle by a bow shackle.

4. an acknowledgement that the regulator alleged a contravention has occurred

It is acknowledged that the Resources Regulator has alleged that Springvale Coal contravened the WHS Act in respect of the Incident.

5. the details of any injury that arose from the alleged contravention



6. the details of any enforcement notices issued that relate to the alleged contravention

Notices received:

Yes (provide details)

No

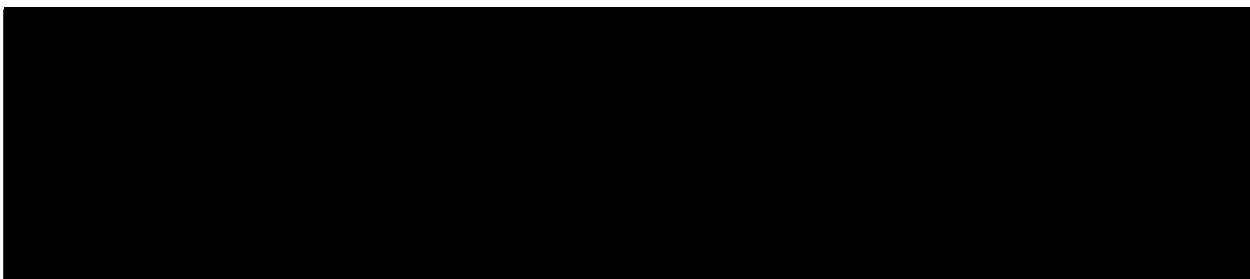
Date issued	Notice type	Notice number	Contravention	Action taken to respond to notice
1 May 2020	Section 155	2000501JG01	Notice to give information to the regulator	Information and documents provided in accordance with the notice.
11 October 2019	Section 155	191011JG01	Notice to give information to the regulator	Information and documents provided in accordance with the notice.
2 August 2019	Section 155	190802JG01	Notice to give information to the regulator	Information and documents provided in accordance with the notice.
12 February 2019	Section 155	NTCE0001503	Notice to give information to the regulator	Information and documents provided in accordance with the notice.
8 February 2019	Section 191	NTCE0001464	Comply with directions	Complied with directions in notice.
8 February 2019	Section 195	NTCE001475	Prohibition of activity	Complied with directions in notice.

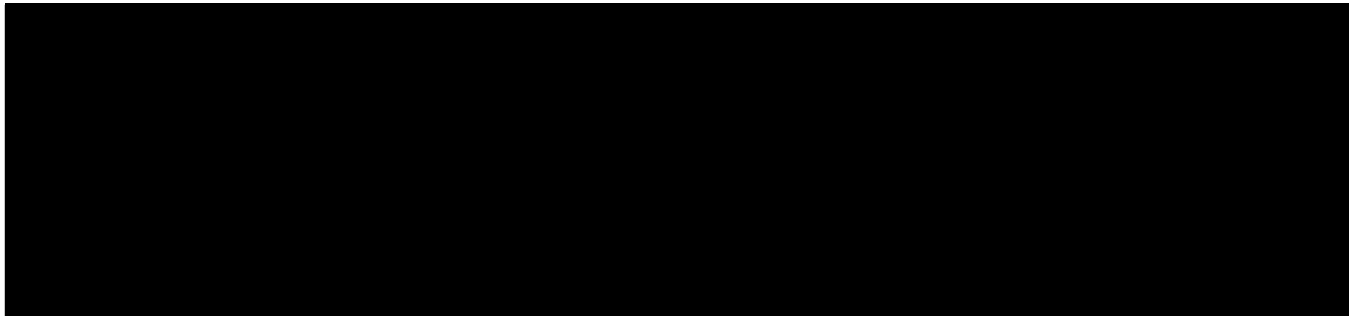
7. a statement of assurance about future work health and safety behaviour

Springvale Coal is committed to complying with all its obligations under the WHS Act, the *Work Health and Safety (Mines and Petroleum Sites) Act 2013 (NSW) (WHS Mines Act)*, and relevant regulations.

8. when an alleged contravention is associated with an injury or illness

8.1. the details of the type of workers compensation provided (if the injured person(s) is a worker of the person)





8.2. details of the support provided, and proposed to be provided, to the injured person(s) to overcome the injury/illness

The injured person is:

- an employee of the entity
- a self-employed person
- other (please specify)
- not applicable

Support provided to the injured person(s) or injured person(s) family:

Date	Description of support	Comment
	Please see above.	

9. the details of any existing safety management systems at the workplace including the level of auditing currently undertaken

Springvale Coal has established and implemented a Safety Management System (**SMS**) pursuant to clause 13 of the *Work Health and Safety (Mines and Petroleum Sites) Regulations 2014 (WHS Mines Regulations)*. The SMS is designed to be used by the Mine as the primary means of ensuring, so far as is reasonably practicable, the health and safety of workers at the Mine. The SMS meets the requirements of the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, *WHS Mines Regulations*, *WHS Act* and *Work Health and Safety Regulations 2017*.

The Springvale SMS is aligned with AS4801:2001 Occupational Health and Safety Management Systems and AS/NZS ISO 31000:2009 Risk Management- Principles and Guidelines.

The SMS is constantly evolving to ensure that it is best positioned to protect the safety of Springvale Coal's workers and to demonstrate the importance Springvale Coal places on fostering a positive safety culture at the Mine.

Springvale Coal recognises that for a SMS to be effective it needs to arm the Mine's workers with suitable tools to enable them to, where appropriate, identify and manage risks to safety. As such, at the heart of Springvale Coal's SMS is a suite of risk management tools.

The suite of risk management tools provided by the SMS are cascading for the purpose of guiding workers to select and adopt appropriate risk control measures for the task that they are undertaking. For example, a Job Safety and Environmental Analysis (**JSEA**) is available, in prescribed circumstances, to assist the workers to identify potential hazards associated with a task and to identify controls to manage the hazards associated with the task. Other layers of risk management tools sit behind the JSEA to verify that it is being used appropriately. For example, Planned Task Observations (**PTOs**) are used to

WHS undertaking

verify that JSEAs are being used in appropriate circumstances and that the JSEA is sufficient to allow workers to safely undertake their work.

Springvale Coal understands that for the SMS's risk management tools (and the SMS as a whole) to work effectively, it is imperative that workers are sufficiently trained and supervised on their use. To this end, workers receive training and supervision commensurate with their roles and responsibilities and various auditing techniques verify that training and supervision are delivering the intended outcomes in this regard.

Springvale Coal has a number of audit mechanisms that measure the effectiveness of its SMS on a weekly, monthly and annual basis. The mechanisms assist Springvale Coal to identify any trends that may be emerging that could identify deficiencies in its SMSs. In addition, some of the mechanisms, such as the PTOs, assist supervisors to build relationships with workers and assist them to gain a better understanding of the issues encountered by the workers.

In order to track any emerging trends Springvale Coal collect the following data:

Positive Performance Indicators including the number of:

- PTOs undertaken;
- START meetings conducted;
- Employee Engagement Meetings conducted;
- Management Leadership Protocols undertaken;
- actions arising from incidents that are overdue;
- drug and alcohol testing undertaken;

Negative Performance Indicators including the:

- number of Lost Time Injuries;
- Lost Time Injury Frequency Rate;
- Lost Time Injury Duration Rate; and
- Number of incidents required to be reported to the regulator.

Springvale Coal recently identified an increase in the number of walking and manual handling incidents the Mine was experiencing. As a result, it engaged Ethoshealth to run a Movesafe program. Ethoshealth is a well-recognised provider of allied health services to the Coal Mining Industry in NSW with a focus to create and deliver solutions to optimise the health and safety of people and organisations. The Movesafe program combines lifestyle information and behaviour approach to address musculoskeletal risks in manual handling activities.

Other audit mechanisms that Springvale Coal have in place include:

- An Audit and Review Schedule that tracks planned and completed audits and reviews;
- The periodic review of the SMS and Principal Mining Hazards Management Plans including, for example, Ground or Strata Failure Management Plan;
- The periodic review of the Mine's Principal Control Plans including, for example, Mechanical Engineering Control Plan, Ventilation Control Plan and Electrical Engineering Control Plan;
- The periodic review of other system controls and elements including, for example, information and communication arrangements and hazardous substances;
- Weekly strata audits and panel inspections conducted by the Mine's Under Managers;
- Geotechnical survey and mapping of all roadways in production and long wall panels by site Geotechnical Engineer/Geologist;
- Peer review of all Geotech survey and mapping by external Geotechnical Engineer;
- Weekly Strata Meetings held by Technical Services;
- Inspections undertaken by deputies including their supervision of workers;
- Workplace inspection schedules are set out in the Business Management Framework (**BMF**). The workplace inspections provide the Mine's management team with additional opportunities to engage with production and maintenance crews;
- The review and consideration of previous shift reports/panel conditions;
- Daily Operational Meetings;
- Site Safety Health Representative two shifts per month to inspect mine operations; and
- Health Safety Environment Committee (HSEC) monthly meetings.

WHS undertaking

10. the details of any consultation undertaken within the workplace regarding the proposal of a WHS undertaking (including workers and work health and safety representatives)

Springvale Coal developed an Enforceable Undertaking Steering Committee (**EUSC**) to better aid the consultation process in and around key project identification, development and ultimate approval.

Springvale Coal provided the workers, who had been closely connected to the Incident, transparency in the EU proposal process by including them in the EUSC. The committee members included the injured worker and other crew members including the Longwall Mechanical Fitter, Longwall Deputy and Longwall Operator. The EUSC comprised of:

- Site Safety Health Representative (**SSHR**);
- Injured Worker;
- Longwall Mechanical Fitter;
- OHS Committee – Workgroup Representative (Deputy);
- Longwall Deputy;
- HSEC Committee – Workgroup Representative (Longwall Operator);
- Springvale Mechanical Engineering Manager;
- Springvale Electrical Engineering Manager;
- Springvale Mining Engineering Manager;
- Springvale Health, Safety and Training Superintendent; and
- Centennial General Manager Health, Safety, Training and Environment.

The EUSC met weekly (Thursdays), on seven occasions, to provide updates, report on the investigation of various initiatives and interrogate the initiatives for their effectiveness. During each meeting the EUSC were reminded of the importance of searching for initiatives that were 'outside of the box' to ensure that Springvale Coal exceeded mere compliance with the WHS Act.

An initial notification was sent to all workers that requested ideas for initiatives to be included in the EU proposal.

11. a statement of regret that the incident occurred (i.e. not an admission of guilt)

Springvale Coal regrets that the Incident occurred.

12. any rectifications made as a result of the alleged contravention

Following the Incident, Springvale Coal reviewed the risk control measures it had in place relevant to the Incident. The review involved, inter alia, reviewing:

- The Lifting, Slinging and Towing training package SV-TA-2949 (**LST Training Package**) to ensure it includes non-standard or complex pulling, towing or snigging activities;
- The Generic Lifting Plan (SV-SWP-2515) to capture the requirement to complete a Complex Lifting Permit and other changes; and
- The Mine's SLAM (Stop, Look, Analyse, Manage) process (the review identified that no changes to the SLAM process were required) and re-trained all workers in the SLAM training package.

In addition to reviewing its processes the Mine also undertook the following initiatives:

- Development of a template/guide to assist workers identify non-standard or complex pulling, towing or snigging activities;
- Development of procedures for non-standard or complex pulling, towing or snigging activities following a review of non-standard activities;
- Trained the Mine's workforce on the updated LST Training Package;
- Developed a Complex Lifting, Slinging and Towing Permit SV-PE-3101 (**Complex Lifting Permit**) that requires a certified dogman to review and sign off non-standard or complex pulling, towing and snigging activities;
- Issued a requirement that Mining Supervisors and other Supervisors are required to record when non-standard or complex pulling, towing or snigging activities have been undertaken under their supervision;

WHS undertaking

- Trained 203 workers in a specialist underground lifting and slinging course (RIIUND207A - Conduct of Underground Lifting Operations);
- Required 42 workers to obtain a licence to Perform Dogging CPCCLDG3001A (this qualification involves each worker completing a course of 40 hours duration); and
- Implemented Lifting, Slinging and Towing Qualifications Requirements SV-STD-3115 for the purpose of confirming the qualification requirements needed to perform lifting tasks at the Mine.

Springvale Coal engaged a Registered Training Organisation to deliver some of the above training programs at a total cost of \$141,689. The total number of working hours that workers dedicated to the training was 3285.

Total amount spent on rectifications \$141,689.

13. an acknowledgement that the WHS undertaking may be published and publicised

Springvale Coal acknowledges that the undertaking will be published on the regulator's website and may be referenced in NSW Resources Regulator material.

Springvale Coal acknowledges that the undertaking may be publicised in newspapers or other publications (where applicable, as specified in Section B – enforceable terms).

14. a statement of ability to comply with the terms of the undertaking

Springvale Coal has the current financial ability to comply with the terms of this WHS undertaking and can provide evidence with this undertaking to support this declaration.

15. statement regarding relationships with beneficiaries

There are no known current relationships with any of the beneficiaries outlined in the enforceable undertaking, other than current employees and contractors of Springvale Coal and the broader coal mining community.

16. intellectual property licence

Springvale Coal grants the regulator a permanent, irrevocable, royalty-free, world-wide, non-exclusive licence to use, reproduce, publish, distribute, electronically transmit, electronically distribute, adapt and modify any materials developed as a result of this WHS undertaking.

17. the company or individual may be required to provide information of any prior work health and safety convictions

The regulator requests a list outlining details of any prior work health and safety convictions or findings of guilt under work health and safety legislation² or work health and safety related legislation.

Does Springvale Coal have any such prior convictions or findings?

Yes No

² Subject to any local legal constraints such as spent conviction legislation.

The list is attached (if applicable)

Yes No

18. a commitment to participate constructively in all compliance monitoring activities of the undertaking

Springvale Coal acknowledges that responsibility for demonstrating compliance with this enforceable undertaking rests with the organisations who have given this enforceable undertaking. Evidence to demonstrate compliance with the terms will be provided to the regulator by the due date for the term.

Springvale Coal acknowledges that the regulator may undertake other compliance monitoring activities to verify the evidence that is provided and compliance with the relevant terms of this enforceable undertaking. The evidence provided to demonstrate compliance with the enforceable undertaking will be

WHS undertaking

retained by the organisations who have given this enforceable undertaking until advised by the regulator that the enforceable undertaking has been completely discharged.

Springvale Coal acknowledges that the regulator may initiate additional compliance monitoring activities of compliance with the terms of the enforceable undertaking, such as inspections, as considered necessary at the regulator's expense.

19. a commitment that the behaviour that led to the alleged contravention has ceased and will not reoccur

Springvale Coal commits that the behaviour that led to the alleged contravention has ceased and that it will take all reasonably practicable steps to prevent recurrence of the Incident.

20. a commitment to the ongoing effective management of work health and safety risks

Springvale Coal commits to the ongoing effective management of work health and safety risks in accordance with the legislation and regulations referred to above.

21. acknowledgment of WHS undertaking guidelines

I have read and understood:

Enforceable undertakings guidelines version 7 dated August 2020.

Section B – enforceable terms

1. Publication of information about the undertaking

Springvale Coal must, within 30 days of receiving notification from the regulator of the acceptance of the WHS undertaking, cause a public notice to be published in the Lithgow Mercury and the Sydney Morning Herald which will be drafted using the script provided in Attachment B.

2. A commitment to disseminate information about the undertaking to workers, and other relevant parties (which may include work health and safety representatives), and in the annual report (if applicable)

Springvale Coal must disseminate information by implementing the following:

- (a) display a summary of the WHS undertaking on all Mine, Mine office and contractor noticeboards at the Mine for 30 days;
- (b) communicate, as far as reasonably practicable, the WHS undertaking through toolbox talks to workers at the Mine, following acceptance; and
- (c) present the WHS undertaking to all the workforce during the Mine Manager's Employee Briefing (a quarterly presentation delivered by the Mine Manager).

Dissemination by each of the above methods must occur within 30 days of receiving notification from the regulator of the acceptance of the WHS undertaking and continue at regular intervals of no more than three months throughout the life of the undertaking (other than paragraph (c) which will occur within 3 months at the next scheduled quarterly Mine Manager's Employee Briefing).

3. Strategies that will deliver worker benefits

Springvale Coal is proposing to introduce an Underground Safety Communication System (**USCS**).

The USCS will enable workers working underground, including production and maintenance workers, to communicate electronically and access and share safety information in 'real time' via tablet and handheld devices.

The USCS will provide coverage at all crib rooms, face areas, long wall, deputy stations, main underground transport road (MTR) and adjacent areas and outbye deputy stations.

The tablet and handheld devices will allow for the taking of photographs and videos of underground operations, including strata or proposed work processes, that can be instantly relayed to mine engineering or other relevant personnel on the surface or in other areas of the Mine to consider and advise upon the approach to safely manage any identified risks.

The USCS will allow for an instant risk assessment, utilising the skills and expertise of the mining engineers and other relevant personnel to apply the safety management system in delivering a safe work process to the underground mine personnel.

If the USCS was in place on the 5 February 2019 when the incident occurred, photographs or video of the AFC could have been relayed to the surface and advice provided as to the appropriate safe work process to be undertaken.

The USCS will be facilitated by the installation of Wi-Fi network infrastructure in the **MTR** and underground crib rooms. The USCS will also draw on existing Wi-Fi network infrastructure currently located at the longwall face, on the continuous miners, out by production districts and some electrical installations. The attached survey of the mine sets out the location of the proposed Wi-Fi network infrastructure.

Springvale Coal will engage Mine Site Technology (**MST**) to develop the required software, design the Wi-Fi network infrastructure and supply the nodes, antennas, cabling and associated equipment that will form the backbone of the USCS.

As part of the USCS it is proposed that key personnel, such as all Deputies and all Trade Supervisors, will be allocated either a handheld or tablet device. Additional handheld devices will be available to underground workers (including contractors).

Springvale Coal acknowledges that the USCS will provide the Mine with some commercial benefit. The ease of communication provided by the USCS will most likely result in greater production and maintenance efficiencies. However, the safety benefits provided by the USCS will be significant compared to commercial benefits for the following reasons:

Provides full access to SMS underground systems, including training packages

1. The USCS will provide access to the Mine's SMS to the vast majority of workers regardless of where they are working underground. This access will mitigate the risk of policies or procedures being misinterpreted if they need to be communicated to the worker by phone or other means. For example, if an electrician is working underground and encounters a piece of equipment he or she needs to isolate, the electrician will have immediate access to the Mine's isolation procedure via a mobile or tablet device. Currently, the electrician would be required to initiate communication by phone if they needed to obtain information about the isolation procedure.

2. The completion of a SLAM, by each worker at the beginning of their task, requires the worker to assess if the identified hazards have been controlled. One question that often follows in this risk assessment process is, "is there a safe work procedure for this task?" The workers will be able to access the USCS and view the relevant safe work procedure for the task. This provides an immediate safety enhancement to the task at hand.

3. The USCS will allow training packages to be available regardless of where workers are working underground. For example, the USCS will allow a deputy to access an applicable training package while underground and then train and assess a worker's competency before he or she undertakes the task. In addition, a deputy will be able to access Pulse (Springvale Coal's training records portal) while underground to confirm that a worker has been assessed as competent in carrying out a particular task.

Links all underground work crews

4. The USCS will link all work crews regardless of where they may be working in the Mine. For example, if a crew pouring concrete on the roadway is delayed, the USCS will allow the crew to be able to immediately initiate contact with other crews who may be affected by their delay. The USCS will reduce the prospect of workers becoming frustrated due to a lack of communication and, ultimately, has the

effect of building morale between the workers working underground which assists in building a positive safety culture.

Photographs and videos as a communication tool

5. The USCS will allow workers to send photographs and videos to workers on the surface or in other areas of the Mine if they need to obtain a specialised view regardless of where they are working underground. For example, if a worker encounters a particular strata issue whilst underground, the exact nature of the condition can be photographed or videoed and compared to other similar locations in the Mine. Videos or photographs will provide an excellent tool to assess and apply the appropriate TARP to manage the relevant strata conditions. A further example of how will the USCS will provide safety benefits to workers is if a partial roof fall occurs. Instant video and photograph images will facilitate the provision of information to quickly identify a safe process to rectify the area subject to rock fall.

Reduce delays in communication

6. The USCS will enable more instantaneous communication for workers in the mine, with one benefit of this being that it will reduce delays or blockages on the MTR. For example, currently, if a machine breaks down on the MTR, a worker is required to communicate with the surface via the nearest underground telephone. This could mean that the worker is required to walk 1-1.5 kilometres while the MTR remains blocked by the machine. Wi-Fi on the MTR will enable communication to be initiated instantaneously with the surface and a plan can be immediately implemented to clear the MTR.

More instantaneous communication will also assist to improve the speed at which an emergency response can be delivered to an emergency situation as it will mean that a worker with a device will be able to communicate immediately with the surface to report an emergency situation rather than having to travel to the nearest underground telephone. This will mean that an emergency response, which may include calling emergency responders, can be activated more quickly. It will also allow communication with the surface while dealing with an emergency situation, for example if an injured worker is being transported to the surface, workers will be able to communicate en-route with emergency responders on the surface to provide updates on the injured workers condition and receive input from emergency responders.

Enhanced Supervision and Governance Arrangements

7. The USCS will enable permits to be approved in real time. Currently a worker is required to obtain a paper based approval for work that is subject to a permit. The USCS will allow approvals to occur via a tablet or handheld device. While the approval of permits in real time will create production efficiencies, it will also encourage workers to use the permit system (a system in place to protect safety) because it provides them with a quick and easy mechanism for their permit to be approved. Had the Incident occurred when the USCS was in place, it could have assisted in preventing it as the relevant tasks being carried out by the workers now require a permit and such permit could have been obtained via a tablet or handheld device with the benefit of a video or photos of the proposed towing arrangement to be sent to the surface and reviewed by relevant personnel, on the surface or at other underground locations, when considering the issuance of the permit.

8. The USCS will also support good governance by assisting with monitoring and supervision as it provides transparency of decisions made underground. For example, Undermanagers working on the surface will have access to decisions made by their Deputies. The Undermanagers will be able to review JSEAs and permits completed by Deputies in real time, rather than at the end of the shift as in a paper-based system.

Reduces administrative burden for workers

9. The USCS will provide Wi-Fi in the crib rooms (currently there are six). Currently there is one computer in the production crib rooms that is connected to the internet via an ADSL connection. In addition, access to Wi-Fi in the crib rooms will reduce the risk of workers relying on out of date safe work procedures, Strata Tarps and JSEAs that may have been left in the crib room by other workers.

10. Workers can enter information into the Work Maintenance System (**WMS**) in real time while they are working underground rather than entering the information into WMS when they reach the surface. This has the advantage of maintaining the accuracy of the information because this contemporaneous entry of information reduces the likelihood of the worker not recording all of the information over the course of their shift. The USCS will eliminate the need for the worker to process the data on the surface. This will also assist to provide more accurate and timely information for the Daily Planning Meeting allowing the correct allocation of resources to be applied.

The Technical Services personnel undertake a number of strata and visual underground inspections. The data recorded in these inspections is by hand written notes. Once the personnel attend the surface the notes are entered in the electronic data systems. The USCS will allow the personnel to enter the data live, take photographs and provide accurate, current information to mine personnel to assist in the provision of resources to safely manage the mine operations.

Reinforces the Mine's safety culture

11. This ease of communication provided by the USCS will reinforce the Mine's safety culture because it will further encourage workers to seek assistance or a second opinion in relation to undertaking a task in a safe manner. It underpins Springvale Coal's policy - "*Think Safe, Work Safe, Home Safe*".

Provides for enhanced emergency management

12. In the event of an emergency, the USCS, will provide increased resolution in tracking data that will enable workers to be identified and contacted quicker in the event of an emergency. This is because each of the workers' cap lamps has a tag that is linked to a Wi-Fi node. As such, with greater Wi-Fi underground, the capacity to track workers will also increase.

13. The USCS will also provide greater communication in the event the Mine needs to be evacuated. Currently workers are contacted via the PED system, a low frequency radio communication system. The PED system is only a one-way communication system which means the workers cannot confirm if they have received any communication. The USCS will allow a message to be sent to a much greater proportion of work areas in the Mine and allow the workers in those areas (who have a device) to confirm receipt of the communication. It will also, by linking with the above tracking data, enhance the level of safety and emergency response for all underground mine personnel.

Springvale Coal recognises that reliable Wi-Fi network infrastructure with high-bandwidth connectivity is important to enable the USCS to deliver its full potential. The current ADSL connections in the Mine have more limited coverage and are not as reliable and accordingly cannot be relied upon to deliver the USCS. As such, Springvale Coal has chosen to work with MST, a leading provider of underground network infrastructure to design the Wi-Fi network infrastructure.

The USCS will also include the implementation of a maintenance strategy to maintain the nodes and ensure that high bandwidth is provided and maintained. A risk based maintenance system will be established to determine the safe maintenance regime. From this maintenance system, work orders will be generated at identified intervals, where the maintenance tasks will be assigned to the appropriate electrician to ensure the USCS is performing at its optimum levels. The nodes will also be included on the Mine's Asset Register.

Audit and Evaluation of USCS

12 months after the USCS has been established, an audit will be conducted to evaluate and report upon the USCS. This audit will consider the effectiveness of the USCS and, in particular, the safety benefits it has provided (and will continue to provide) to workers. A software system will be used to assess the use of the USCS.

4. Strategies that will deliver industry benefits

Springvale Coal will develop a bespoke Slinging, Lifting and Towing (**SLT**) training program specifically for underground coal mines.

The Resource and Infrastructure Industry (RII) courses that are currently available are not tailored to the specific risks encountered in respect of SLT in an underground coal mine environment. While the existing SLT training programs are broad enough to provide sufficient training to underground coal workers for the purposes of the WHS Act, an opportunity exists for the development of a bespoke SLT training program for underground coal mines.

The underground coal SLT training program will address SLT risks pertaining specifically to underground coal mines including those risks associated with working in a confined work area. Some of these include moving loads in a horizontal plane within a restricted and low light location. Notably, the underground coal SLT training program will not include irrelevant content, some of which is included in the currently available SLT training programs. For example, SLT training programs that include content associated with cranes and elevated work platforms is irrelevant for SLT tasks that are undertaken underground. Removing irrelevant content means that the workers can spend more time learning about the risks that are relevant to their work.

Springvale Coal will engage Coal Services NSW Pty Ltd (**Coal Services**) as the Registered Training Organisation to develop and deliver the underground coal SLT training program. The underground coal SLT training program will then be an available resource for other underground coal mines to access.

The USCS will also provide a benefit to the coal mining industry of NSW because it will demonstrate to other underground coal mines in NSW that the technology is available to provide workers with continuous communication while working underground and the associated safety benefits. Springvale Coal understands that while underground safety communication systems are common in metalliferous mining, the use of a tablet or handheld device in a whole of mine network, is not common in underground coal mining. Accordingly, Springvale Coal will lead the way in demonstrating a safe and effective implementation of the USCS.

Reports of each of the above projects will be delivered in a seminar to at least three mining industry conferences or seminars, including the Mining Engineering Seminar and the Mine Managers Association of Australia CPD Seminar. The details of the projects will also be made available to underground mines throughout Australia for their use.

5. Strategies that will deliver community benefits

Springvale Coal will make a donation of \$150,000 to the Lithgow station of NSW Ambulance. The donation is for NSW Ambulance to procure a new 4WD vehicle for the Lithgow station's fleet.

The nature of the geography and activities undertaken within the Lithgow Station response area present a variety of trauma and medical incidents that require the paramedics to access difficult terrain. For example, the Lithgow Station has responded to walking, canyoning, rock climbing and camping related incidents. These incidents are in addition to the normal medical and trauma workload in the area.

The additional 4WD vehicle will provide Lithgow station and the surrounding region with an increased capability to respond to incidents that occur within its relatively large incident response area. The 4WD vehicle will also provide Lithgow station with a greater capability to provide treatment to people during severe weather and fire events and access to mine workers who may be required to access the Newnes Plateau area where the predominant leaseholds of Springvale and other mines are located.

6. A commitment regarding linking the strategy and promotion of benefits to the WHS undertaking

Springvale Coal commits that it will link the promotion of any benefits arising from the WHS undertaking and associated initiatives to the WHS undertaking.

7. Reimbursement of the regulator's agreed costs associated with, and any monitoring of, the enforceable undertaking

Springvale Coal must pay the regulators recoverable costs associated with the undertaking, as itemised below, and acknowledges that payment is due **30 days** after receipt of the regulator's invoice:

WHS undertaking

<input type="checkbox"/> investigative, legal and administrative costs	\$50,742
<input type="checkbox"/> compliance monitoring costs	\$10,000
<input type="checkbox"/> publication costs	\$
Total amount	\$60,742

Insert case, if any, for why the regulator would not seek to recover costs.

8. Minimum spend

Springvale Coal must spend a minimum of \$540,742, excluding GST, in carrying out its obligations as set out in this WHS undertaking, inclusive of the regulator's recoverable costs.

Springvale Coal acknowledges the minimum spend comprises of:]

Activities to deliver	Total estimated cost
Benefits to workers	\$230,000 (excl GST)
Benefits to industry	\$100,000 (excl GST)
Benefits to community	\$150,000 (excl GST)
Regulator recoverable costs	\$60,742
Estimated total value of the undertaking	\$540,742 (excl GST)

9. Project of undertaking

Where a project or projects are proposed to deliver benefits to workers, industry and community, Springvale Coal offers and will carry out the projects set out in Attachment A to this WHS undertaking.

10. Timeframe for delivery

The strategies set out in this WHS undertaking must be completed by Springvale Coal on or before 24 months following acceptance of this enforceable undertaking by the regulator.

Section C - Offer of undertaking

BY AN INDIVIDUAL

I offer this undertaking and commit to the terms herein.

Signed:
[Person]

Name:
[Print name]

Position:

Dated at this
..... day of, 20.....

BY A CORPORATION

As a duly appointed and authorised officer or agent of
Springvale Coal

I offer this undertaking and commit
Springvale Coal
to the terms herein.

Signed:
[Director]

Name: **Craig Gillard**
[Print name]

Position: Director

Dated at *Sydney* this
30 day of *November*, 20*20*

Signed:
[Director or company secretary]

Name: **Tony Macko**
[Print name]

Position: *Company Secretary*

Dated at *Sydney* this
30 day of *November*, 20*20*

Section D – Regulator’s acceptance of undertaking

I accept this undertaking as an enforceable undertaking under section 216 of the *Work Health and Safety Act 2011*.

Signed:

Position: **Executive Director** delegate of the Secretary, Regional NSW

Dated at **Newcastle** this
.....*7th* day of **December**, 20*20*

ATTACHMENT A

(This attachment is incorporated in and considered part of the WHS undertaking given by Springvale Coal for the purposes stated herein, and are enforceable terms given under section B of the undertaking by Springvale Coal).

Springvale Coal will undertake the following:

1. Project 1: Underground Safety Communication System

(a) Objective

Springvale Mine is proposing to provide workers with an Underground Safety Communication System (USCS).

(b) Purpose

The USCS will enable workers working underground to communicate electronically and access and share safety information in 'real time' via tablet and handheld devices.

The tablet and handheld devices will allow for the taking of photographs and videos of underground operations, including strata or proposed work processes, that can be instantly relayed to mine engineering personnel or other relevant personnel on the surface or in other areas of the Mine to consider and advise upon the approach to safely manage the identified risks.

The USCS will be facilitated by the installation of Wi-Fi network infrastructure in the MTR and underground crib rooms and the use of Wi-Fi-enabled handheld devices. The USCS will also draw on existing Wi-Fi network infrastructure currently located at the longwall face, deputy stations, on the continuous miners, out by production districts and some electrical installations.

Installation of the Wi-Fi network infrastructure in the MTR Road will involve installing 34 MSR Axon Wi-Fi nodes along the MTR road, all crib-rooms and deputy stations. The nodes will enable Wi-Fi coverage within approximately 100 metres of the areas frequently accessed by workers (100 metre radius from the nodes, 200 metre diameter of coverage).

Springvale Coal will engage MST to develop the required software, design the Wi-Fi network infrastructure and supply the nodes, antennas, cabling and associated equipment. MST is a global business with over 30 years' experience in mining and tunnelling technology delivering innovative systems for wireless technologies in underground coal mining environments. Installation of the nodes, cabling and equipment will be undertaken by experienced and qualified electricians.

The USCS will provide workers with real time information sharing including access to Springvale Coal's SMS via approved Android tablets and Android handheld devices. The Mine recently purchased additional devices for its workers to use underground. The Mine currently has 57 Smart Ex android devices (handheld) and 10 Smart Ex devices (tablet) for use underground. These existing devices will be fundamental in the application of the USCS once greater WiFi coverage is installed. Presently, where workers or deputies obtain access to the SMS whilst underground, such access is provided by a fixed point computer.

Further, Mine personnel will often print out a hard copy of the safe work procedure which is relevant for that particular shift only. However, these documents will sometimes be held by Mine personnel and placed in their crib tin or other location to be used on the next occasion, which can result in out of date versions being available to workers. The SMS requires a current safe work procedure to be used at all times. The USCS will negate the need for Mine personnel to print out and rely upon hard copy documents. Access to the SMS via the USCS will provide direct access to the current safe work procedures, permits and JSEAs.

In particular, the USCS will provide work crews with the following benefits:

- The ability to initiate immediate contact with their supervisor should they require clarification or assistance in relation to a task including removing any potential miscommunication that can occur via phone communication alone;

WHS undertaking

- Facilitate the approval of permits by a supervisor who may be located in a different part of the Mine;
- Provide a communication link to work crews working in different areas underground;
- Facilitate the use of the JSEA risk assessment tool to assess the hazards and risks and implement the reasonably practicable controls. The completed JSEA will be available for other workers to reference;
- Provide a real time interactive tool for developing lifting plans and undertaking risk management of a work process that can be reviewed and approved remotely;
- Provide access to completed risk assessments to assess the reasonably practicable controls for the particular underground work environment;
- Provide greater transparency to Undermanagers of the decisions being made by workers underground, such as tracking the use of permits and compliance against the Springvale SMS;
- Enable workers to access training packages underground and/or to confirm whether a worker is competent in a particular training package;
- Enable workers to enter information into the WMS in real time;
- Reduce the risk of workers relying on outdated safe work procedures by providing Wi-Fi in the crib rooms;
- Enable workers to send photographs or videos to workers on the surface or in other areas of the Mine to assist the underground workers to procure specialist information in relation to a task or in relation to the environment they are working in;
- Provide verbal and/or visual communication during the lengthy travel down the MTR from the surface; and
- An increased resolution in tracking data that will enable workers to be identified and contacted quicker in the event of an emergency.

This ease of communication across work crews, regardless of where they are working underground, will reinforce the Mine's safety culture because it will further encourage workers to seek assistance or a second opinion in relation to undertaking a task in a safe manner. It underpins Springvale Coal's policy - *"Think Safe, Work Safe, Home Safe"*.

(c) Deliverables

The USCS will involve:

- The engagement of MST to develop the software program, design the Wi-Fi network infrastructure and supply the nodes, cabling, antennas and other ancillary equipment.
- Installation of the Wi-Fi network in the MTR and crib rooms will be undertaken by an experienced and suitably qualified electrical contracting company, which is estimated to take approximately 720 man hours.
- MST will undertake the commissioning and testing of the complete underground Wi-Fi network to ensure that the coverage of the W-Fi underground is optimised. This will ensure that any potential Wi-Fi 'dead spots' (for example, behind a pillar) are minimised as far as possible.
- Further training of Mine personnel, as required, on the use of the electronic devices whilst underground.
- Implementation of a maintenance strategy that will require maintenance be undertaken on the Wi-Fi infrastructure to ensure that its serviceability is optimised.
- The review of the project to involve an evaluation report about the USCS and in particular, the safety benefits the USCS brought to Springvale Coal's workers.

WHS undertaking

(d) Timeframe

Task	Due Date
Engagement of MST to design software and the Wi-Fi network infrastructure for the MTR including supply of 34 MST Axon Wi-Fi nodes, cabling, antennas and ancillary equipment.	Within 3 months of acceptance of WHS undertaking.
Completion of the installation of the Wi-Fi network infrastructure including the 34 MST Axon Wi-Fi nodes by an electrical contractor engaged by the Mine.	Within 12 months of acceptance of WHS undertaking.
The USCS goes live.	Within 12 months of acceptance of WHS undertaking.
MST complete optimisation of coverage for the complete underground Wi-Fi network infrastructure for the purpose of optimising the effectiveness of the USCS.	Within 14 months of acceptance of the WHS undertaking.
Implementation of a maintenance strategy to provide for maintenance of the USCS.	Within 14 months of acceptance of the WHS undertaking.
Completion of an evaluation report of use and effectiveness of the USCS	Within 24 months of acceptance of the WHS Undertaking.
Presentation by Springvale Coal of the evaluation report prepared by Springvale Coal on the use and effectiveness of the USCS to at least 3 Mining Industry Conferences or Seminars, including the Mining Engineering Seminar and the Mine Managers Association of Australia Annual CPD Seminar	Within 30 months of acceptance of the WHS Undertaking.

2. Project 2: Bespoke Slinging, Lifting and Towing training program for underground coal mines

(a) Objective

Engage a Registered Training Organisation (RTO) to develop and deliver a bespoke Resource and Infrastructure Industry (RII) training program for underground coal mine slinging, lifting and towing (SLT) tasks.

(b) Purpose

Within the NSW mining industry only a few RII training programs exist with respect to SLT tasks. Of the RII SLT training packages that do exist, none pertain specifically to SLT tasks undertaken underground. For example, content in the current SLT training programs that include lifting and slinging techniques associated with cranes and elevated work platforms (EWPs) is redundant in an underground mining environment as cranes and EWPs cannot be used in an underground mine.

Within NSW, the current Dogging and Rigging Courses that provide a High Risk Licence pursuant to the WHS Regulations of NSW, focus on lifting and slinging loads in the construction industry. The course, which is conducted over five days, in an open environment, utilises cranes and lifting techniques for the movement of loads in a vertical plane. The courses have little similarity to an underground mining environment with limited space and lighting.

While the existing RII SLT training packages are broad enough to cater for the diversity and range of mining industry applications (and therefore enable mines to comply with their obligations under the WHS Act), a more comprehensive and bespoke training opportunity exists for the development of an underground coal SLT training program.

A bespoke SLT training program will directly integrate mining 'dialogue' and requirements. It will assist underground coal operators by providing a more granular context of relevant irregular and common mining processes to the existing SLT training programs available.

A bespoke SLT training program will also enhance the Mechanical Engineering Control Plan (MECP). This is because an SLT training program designed specifically for underground coal mines will complement the existing suite of safety control measures contained in the MECP.

Springvale Coal will engage Coal Services NSW Pty Ltd (**Coal Services**) as the RTO to develop and deliver the underground coal SLT training program.

The underground coal SLT training program will be available for other mines to access.

Coal Services have provided a letter confirming its understanding of the scope of its engagement.

(c) Deliverables

The development of the bespoke SLT training program will involve the engagement of a Registered Training Organisation, Coal Services, who will develop the bespoke SLT Course.

The bespoke SLT training program will be delivered to all fitters working at Springvale Mine. The SLT training program will be relevant to the underground coal mining environment and participants will be assessed by Coal Services. Springvale Coal will also continue to train other workers in this SLT training program and will aim to have 50% of Mine workers go through the program within 3 years of the program being rolled out.

The effectiveness of the SLT training program will be assessed and a report prepared upon the application of the SLT training program at the Mine and the comments by the participants as to its relevance and use.

The final project report will then be presented to at least three mining industry conferences or seminars. The course will be made available to any underground coal mine in Australia.

WHS undertaking

(d) Timeframe

Task	Due Date
Engage Coal Services to develop the SLT training program.	Within 1 month of acceptance of the WHS undertaking.
Coal Services develops content for SLT training program including undertaking consultation with stakeholders.	Within 14 months of acceptance of WHS undertaking.
Train 100% of the Mine's fitters in the SLT training program (currently there are 42 fitters employed).	Within 20 months of acceptance of the WHS undertaking
Assessment and drafting of report upon the effectiveness of the SLT training program.	Within 24 months of acceptance of the WHS undertaking
Presentation of the project findings to at least 3 mining industry conferences or seminars, including the Mining Engineering Seminar and the Mine Managers Association of Australia Annual CPD Seminar.	Within 30 months of the acceptance of the WHS Undertaking.

3. Project 3: Donation to NSW Ambulance

(a) Objective

To provide a donation to a local organisation in order to support the Lithgow and wider community.

(b) Purpose

NSW Ambulance Lithgow Station has identified a need for a second first response recovery 4WD vehicle.

The Lithgow Station's response area covers a large geographical area that borders Rylstone, Oberon and Bathurst (Katoomba and Richmond to the east). Vast areas of National Parks and State Forest fall within the Lithgow Station response area, in addition to the mining leases and private and crown land.

The nature of the geography and activities undertaken within the Lithgow Station response area present a variety of trauma and medical incidents that require the paramedics to access difficult terrain. For example, the Lithgow Station has responded to walking, canyoning, rock climbing and camping related incidents. These incidents are in addition to the normal medical and trauma workload in the area.

Other frequent unplanned weather events also require remote accessibility including incidents brought about by heavy rain (especially on unsealed roads), storms, heavy snow and bushfires.

Representatives from the Lithgow Station have advised Springvale Coal that weather related incidents often exhaust existing NSW Ambulance resources and highlight deficiencies in contingency planning and local resilience and was one major 'talking point' in the debrief of the 2019-20 bush fire season.

The Lithgow Station currently has one 4WD 76 series Toyota Land Cruiser in its fleet. The nearest 'back up' 4WD ambulances are located at Rylstone, Oberon and Bathurst.

NSW Ambulance is currently reviewing the 4WD 76 series Toyota Land Cruiser in order to replace them. NSW Ambulance has identified the 4WD 200 series Toyota Land Cruiser as an appropriate replacement 4WD vehicle.

The introduction of the 4WD 200 series Toyota Land Cruiser will provide the Lithgow Station with an access vehicle that allows paramedics to locate, access and treat victims in locations that may be harder to access by a traditional ambulance.

The Lithgow Station has advised that a second 4WD 200 series Toyota Land Cruiser would be beneficial because it will provide additional capability particularly in the following circumstances:

WHS undertaking

- where one 4WD vehicle is already being used. On occasion the Lithgow Station relies on another station to provide assistance with their 4WD vehicle when there is a need for two. Waiting for a 4WD vehicle to arrive from another station presents obvious time delays;
- to assist in dealing with complex patient extrications on the vast off road network that the Lithgow response area encompasses (as detailed above); and
- During severe weather and fire events we would have better capability in reaching victims.

NSW Ambulance and Lithgow Ambulance Station have confirmed in writing, that the donation will be used for the purchase of a modified 4WD 200 series Toyota Land Cruiser.

(c) Deliverables

Provide a donation of \$150,000 to the NSW Ambulance Lithgow Station for the procurement of a second 4WD vehicle to assist the Lithgow station respond to the range of incidents encountered in its response area.

(d) Timeframe

Task	Due Date
Commitment of funds to NSW Ambulance (Lithgow district) of \$150,000.	Within 4 months of acceptance of the WHS undertaking

4. Costs

Springvale Coal agrees to pay the following minimum amounts as tabled in relation to each project identified.

Project	Cost \$
Project 1: Underground Safety Communication System	\$230,000
Project 2: Bespoke Slings, Lifting and Towing training program for underground coal mines	\$100,000
Project 3: Donation to NSW Ambulance	\$150,000
Total Minimum Cost	\$480,000

5. Project Management Team

The Mine has assembled a "Project Committee" that comprises of a cross section of roles specific to each area that is required to manage each of the Project elements:

- Springvale Coal Mining Engineering Manager (Project Owner);
- Springvale Coal Business Improvement Manager ;
- Springvale Coal Production Manager;
- Springvale Coal Engineering Manager;
- Springvale Coal HSEC Superintendent;
- Springvale Coal Technical Services Manager; and
- Springvale Coal Site Safety and Health Representative.

Overall responsibility for the Project will be allocated to the Mining Engineering Manager and the appointed Project Manager.

WHS undertaking

The Springvale Appointed Project Manager will act as the Project Committee Chairperson and is responsible for organising Project Committee meetings, allocating actions and tracking overall progress of each element of the projects.

The Project Committee will meet on a monthly basis as a minimum, this may vary dependant on the status of the project. The Appointed Project Manager will be responsible for Scheduling meetings as required.

Any external resources, for example training providers, will be organised through the Project Committee and scheduled by the Appointed Project Manager for the project.

ATTACHMENT B

(This attachment is incorporated in and considered part of the WHS undertaking given by Springvale Coal for the purposes stated herein, and are enforceable terms given under section B of the undertaking by Springvale Coal).

Public Notice of regulator's acceptance of undertaking

Notice of acceptance of a WHS undertaking under Part 11 of the Work Health and Safety Act 2011

On 5 February 2019, at the Springvale Colliery (the **Mine**), a worker who was employed by the Mine, was injured when his ankle was hit by a bow shackle after a towing arrangement, designed to free an armoured face conveyor chain, failed (**Incident**).

Springvale Coal Pty Limited (**Springvale Coal**) is the mine operator at the Mine. The Secretary for Regional NSW investigated the Incident and subsequently alleged that Springvale Coal contravened the *Work Health and Safety Act 2011* (the **Act**) by failing to discharge its obligations under section 19(1) of the Act, to ensure, so far as is reasonably practicable, the health and safety of workers at the Mine.

Springvale Coal entered into a work health and safety enforceable undertaking with the Secretary for Regional NSW in relation to the Incident.

This notice has been published under the terms of a WHS undertaking and acknowledges acceptance of an undertaking, that is enforceable under the WHS Act, from Springvale Coal.

The undertaking requires the following actions:

- Implement an Underground Safety Communication System;
- Develop and deliver a bespoke training program for lifting, slinging and towing tasks undertaken underground; and
- Donate \$150,000 to the NSW Ambulance Lithgow station for the purpose of it procuring a new 4WD vehicle.

The total value of the WHS undertaking is \$540,742.

The full undertaking and general information about enforceable undertakings is available at www.resourcesregulator.nsw.gov.au