



VUL-ATN-31- Blast Controller Authorisation

All Blast Sweepers are required to be site authorised prior to acting in a Blast Sweeper position at Vulcan Mine.

Supervisor Approval to Undertake Assessment			
Name:		Signature:	Date:
Trainee Details			
Name:		DOB:	
Company:			
Pre-requisites			Trainer/ Assessor Initial
☐ Vulcan Mine Site Inducted			
☐ Site Appointed Supervisor			
☐ Trainee reviews and understands VUL-FRM-16-02-Blast Controller Checklist			
☐ Trainee reviews and understands VUL-SOP-116g Charging and Firing Explosives			
Trainee Acknowledgement			
<i>I acknowledge receipt of this authorisation and understand my responsibilities and obligations under the Vulcan Safety and Health Management System, the Coal Mine Safety and Health Act 1999 and the Coal Mining Safety and Health Regulations 2017, in relation to shot firing activities at Vulcan Mine.</i>			
Name:	Signature:	Date:	
Trainer/Assessor Verification			
<i>I verify that the trainee has the current pre-requisites required for this authorisation.</i>			
Name:	Signature:	Date:	
HST Department Verification			
Name	Signature	Date	
SSE/SSE Delegate Sign Off			
<i>I hereby authorise the abovementioned Coal Mine Worker as a Blast Sweeper at Vulcan Mine</i>			
Name	Signature	Date	



Responsibilities of Blast Controller

1. Blast Controller must plan and prepare for each blasting event in consultation with the D&B engineer and OCE at Vulcan Mine.
2. The Blast Controller must coordinate all security including Blast Sweepers, Blast Guards, Traffic controllers and Shotfirers on the day of the blast, as well as notify/communicate with all other stakeholders including neighbours on the day of the blast.
3. Must ensure all required documentation and reports are completed pre and post blast.
4. Blast Controller must complete an exclusion zone drive around prior to blasting and ensure communications to area Supervisors are understood where and when to evacuate plant and personnel.
5. The Blast controller must organise for blast guard cones to be placed in the correct positions aligning with the blast map.
6. In consultation with the OCE, the Blast Controller will organise the most appropriate time and location for the Blast Guard meeting and ensure the follow attends:
 - a) Shotfirer
 - b) Blast Controller
 - c) Sweepers
 - d) Blast Guards
 - e) Open Cut Examiner
 - f) Other personnel relevant to the blast
7. The Blast Controller must allow extra time at Blast Guard meetings to consult, familiarise and sign off new Blast Guards and Sweepers
8. Post blast the Blast Controller must monitor fume and direct personnel accordingly.
9. Post blast the Blast Controller is to be notified about any fly rock, open edges or any other hazards caused by the blast and work in conjunction with the OCE to implement controls to achieve an acceptable level of risk

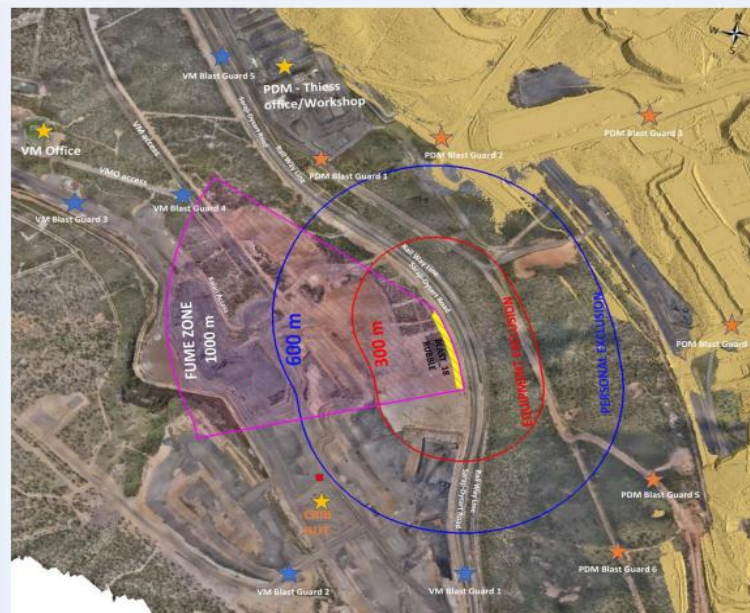


Theory Assessment	Satisfactory
1. What is the Blast Controller directly responsible for?	☐
2. Who must the Blast Controller consult and ensure Blast Notifications are sent out at least 24hrs prior to the blast?	☐
3. Prior to blasting must the Blast Controller facilitate a meeting with the blast crew to determine all aspects of the schedule blast? a) True b) False	☐
4. The Blast Controller shall take into consideration the following: a) Dust/Fume path b) Inversion layers c) Wind speed and direction d) Neighbors e) Expiry of product f) Wet holes g) All of the above	☐
5. What channel at Vulcan Mine must be used during blasting?	☐
6. Explain the things that should be on a blast map?	☐
7. Once confirmed that all Blast Guards are in position and the area is secure, who does the Blast Controller contact?	☐
8. The Blast Controller during blasting activities must always maintain communications with: a) Shotfirer b) Blast Guards c) Blast Sweepers d) Other blast crew members e) All of the above	☐
9. Who is responsible for conducting the exclusion area sweep prior to the blast?	☐
10. How long prior to the blast should the Blast Controller call all Blast Guards to ensure they are in position and the area is secure?	☐
11. Whose responsibility is it to release the Blast Guards following the blast?	☐
12. What records and documentation must the Blast Controller keep on file post blast to comply with site and statutory regulations?	☐



Conditions / Positions	Normal State (Low)	Level 1 Response (Moderate)	Level 2 Response (High)	Level 3 Response (Very High)
Trigger / Conditions	Blast Initiated – No recognised fume event evident and is inside the exclusion zone.	Blast Initiated – Fume event evident but is contained within the fume exclusion zone wedge.	Blast Initiated – Fume event evident and has breached fume exclusion zone / Guards fallen back (No exposure to NOx).	Blast Initiated – Fume event evident - Fume has breached exclusion zone had has or has potential to expose personnel.
Blast Guards	Hold your Blast Guard position until the all clear has been given by the Blast Controller.	- Ensure your guard position is clearly understood and a pre-determined retreat plan is in place. - If in doubt ask the Blast Controller to repeat the instructions. - Understand if fume cloud is moving toward you and you do not have time to move safely, ensure the windows are up and air-conditioning and fan is off or on recycle.	- Monitor radio channel during blast. - Follow the Blast controller direction. - Leave vehicle running and windows up at all times. - Monitor dust cloud and fume event position and distance to your location. - Communicate to Blast Controller if you feel that your position may be close to the fume cloud and need to fall back.	- Follow Emergency Response Procedures - Ensure you hold your Blast Guard position until the all clear has been given by the Blast Controller unless you are required to utilise your pre-determined retreat plan. - Monitor dust cloud and fume event position and distance to your location. - Understand if fume event is moving towards you and you do not have time to move safely, ensure the windows are up and air-conditioning/fan is off or ensure on recycle. - Be aware of emergency vehicles in your area.
Blast Sweepers	- Remain on standby outside guard positions and monitor radio. - Be prepared to provide assistance to the blast controller if called upon.	- Remain on standby outside guard positions and monitor radio. - Be prepared to provide assistance to the blast controller if called upon.	- Remain on standby outside guard positions and monitor radio. - Be prepared to provide assistance to the blast controller if called upon.	- Follow Emergency Response Procedures - Monitor radio channel and be prepared to supply assistance in the emergency situation
Coal Mine Worker	- At pre-start ensure any blast details are clearly understood, if not ask your supervisor. - Maintain radio silence until all clear is given by the blast controller.	- At pre-start ensure any blast details are clearly understood, if not ask your supervisor. - Maintain radio silence until all clear is given by the blast controller.	- At pre-start ensure any blast details are clearly understood, if not ask your supervisor. - Maintain radio silence until all clear is given by the blast controller. - Monitor the radio channel during the blast. - Follow directions from your Supervisor, Blast Controller or Blast Guard.	- Follow Emergency Response Procedures. - If blast fume or dust is heading in your direction, contact the Blast Controller and follow their directions, to relocate to a specified safe location or retreat if possible. If this is not possible take shelter in a safe location from blast fume in a sealed cab or crib room with the windows up and air-conditioning/fan off or on recycle.
ERT	Ensure all ERT personnel are briefed on planned blast e.g. Pre-start Meeting.	Monitor Radio channel for any changes in Blast conditions.	Monitor radio channel for any changes in Blast conditions.	- Follow Emergency Response Procedures. - Prepare to treat personnel onsite if exposed to NOx Blast fume.

Typical Vulcan Mine projected blast fume map





1- Fume



2- Minor Fume



3- Moderate Fume



4- Significant Fume



5- Major Fume

