

AusIMM Southern Queensland Student Chapter

Local Mining Games Official Rules 2021



TABLE OF CONTENTS

1	Summary	4
2	Important Information	5
2.1	Compulsory Risk Assessment.....	5
2.2	Compulsory Breath Testing	5
2.3	Compulsory Airleg Inductions	5
2.4	Safety Equipment Requirements	5
2.5	Teams	5
2.6	Scoring.....	6
3	Event Information	7
3.1	Hand Mucking	7
3.1.1	Required PPE	7
3.1.2	Description	7
3.1.3	Scoring & Penalties.....	7
	Time Restrictions.....	8
3.2	Swede Saw.....	9
3.2.1	PPE Requirements	9
3.2.2	Description	9
3.2.3	Scoring & Penalties.....	9
3.2.4	Time Restrictions.....	10
3.3	Sandvik Airleg Drilling	11
3.3.1	PPE Requirements	11
3.3.2	Description	11
3.3.3	Scoring & Penalties.....	11
3.3.4	Time Restrictions.....	12
3.4	Track Set.....	13
3.4.1	PPE Requirements	13
3.4.2	Description	13
3.4.3	Scoring & Penalties.....	14
3.4.4	Time Restrictions.....	14
3.5	Gold Panning.....	15
3.5.1	PPE Requirements	15
3.5.2	Description	15
3.5.3	Scoring & Penalties.....	15
3.5.4	Time Restrictions.....	15
3.6	Rock ID.....	16
3.6.1	PPE Required	16
3.6.2	Description	16
3.6.3	Scoring & Penalties.....	16
3.6.4	Time Restrictions.....	16
3.7	Blast Face Tie-In	17
3.7.1	PPE Requirements	17
3.7.2	Description	17
3.7.3	Scoring & Penalties.....	17
3.7.4	Time Restrictions.....	18
	APPENDIX 1 – Risk Assessment Template.....	19
	APPENDIX 2 – Risk Assessment Matrix.....	20

APPENDIX 3 – Score Sheets.....	21
--------------------------------	----

1 SUMMARY

The 2021 Southern Queensland Local Mining Games (LMG) competition will be hosted by the AusIMM Southern Queensland Student Chapter in Brisbane at the Mining 3 headquarters in Pinjarra Hills. This document includes a general description as well as the rules for each event.

LMG 2021 will be composed of the following seven events:

1. Hand Mucking
2. Swede Saw
3. Airleg Drilling
4. Rail Set
5. Gold Panning
6. Rock Identification
7. Blast Face Tie-In

The rules lay out the guidelines for these events and specifies certain scoring, safety and housekeeping matters.

2 IMPORTANT INFORMATION

2.1 Compulsory Risk Assessment

Every team is required to complete a risk assessment before each event (similar to a “Take 5”). The Judges will provide the risk assessment sheet at the event. A template of the risk assessment sheet has also been included in Appendix 2 of this document. Where possible teams should arrive to each event 5-10 minutes prior to complete their risk assessment and give to the judge for approval.

2.2 Compulsory Breath Testing

Upon signing in, all competitors must pass an alcohol breath test before being allowed to compete. **Zero tolerance will be enforced.** Any competitor reading above 0.000% will be required to remain at the St Johns first aid station until they pass another test. Organisers on site may ask the competitor to leave site if they are too intoxicated. Officials have the right to disqualify a team from a particular event if the whole team is not fit for work at the start of the event.

2.3 Compulsory Airleg Inductions

All team members competing in the Airleg Event are required to complete a compulsory induction before competing. **Inductions will be held on Friday 9th of April for all competing teams.** Only the 3 competing members are required to attend the induction.

2.4 Safety Equipment Requirements

The items listed below are compulsory, must be brought to the site and worn at all times by all competing members in all events:

- Steel capped boots
- Long legged cotton/denim work pants
- Long sleeved cotton work shirts (**Competition Drill Shirts provided**)
- Hard hats will be provided for each event; it is recommended that competitors bring their own.

It is recommended all competitors bring their own safety glasses and gloves for competition ensuring correct fit. Spare safety glasses and gloves will be located at events for the duration of the competition; however, it is highly recommended all competitors bring their own.

All PPE brought by competitors will be approved by the event judge to be used. There will be a zero-tolerance policy for any competing teams that compromise the overall safety of the events, and all competitors are to comply with the safety regulations set out for each event. Judges have the discretion on what constitutes safe conduct if the situation is not addressed specifically by the rules and can award penalties and/or disqualification as they see fit.

2.5 Teams

Competitors are required to register as teams, each team comprising a minimum of five team members and a maximum of six. A maximum of five members are to compete in any one event.

The teams can compete within one of the three divisions as outlined below*.

- Men's/Women's Division: Teams in this division are composed of students with no limitations on gender.
- Mixed Division: Teams in this division are composed of students, but **must have a minimum of two female members per team**. In this division five-person events shall be completed by at least two of each sex; two-person events shall be completed by at least one member of each sex.
- Corporate/ Alumni Division: Teams in this division are composed of past graduates and people from within the mining industry. The Corporate Alumni Division is specifically for corporate competitors who don't necessarily train, but would like to participate. Teams can be mixed with any number of Male and Female competitors.

Please Note: Officials have the right to merge divisions if numbers are too low.

2.6 Scoring

Scoring for all divisions will be conducted as follows:

All events are equally weighted.

Points will be awarded for each event in the following way:

- 1st place – 1 point
- 2nd place – 2 points
- 3rd place – 3 points
- nth place – nth point, etc.

If a team is disqualified they will receive the maximum number of points for that event.

- The team in each division with the fewest number of points at the end of the competition is deemed the winner of that division.
- Should an event position be tied, both/all teams will be awarded the same prize and the place/s after the tied position will not be included; i.e. if two teams tie for second place, there is no third place.
- Should an overall position be tied, the team's placing in the track stand event will be used as the tie breaker; i.e. if two teams tie for 2nd overall, one team placing 3rd in track stand, the other placing 4th, the team that placed 3rd in track stand will receive preference for the overall ranking.

Judges always have the overruling say if there are any disputes in event scoring. Uncalled for behaviour may lead to team disqualification. The events must be completed in the intended spirit and manner of the event.

3 EVENT INFORMATION

3.1 Hand Mucking

3.1.1 Required PPE

The following PPE will be required at this event by all competitors:

- Steel toed boots and long legged/sleeved apparel
- Hard hat (provided)
- Gloves
- Safety glasses

3.1.2 Description

The following equipment will be provided:

- 1 x Rail Cart
- 1 x Pre-set 10m rail track
- 4 x Shovels (only 2 to be used at once)

Teams of five members will compete in this event; three of whom will be muckers and two will be screeders. Mixed teams must have at least one female and one male as designated muckers. The team will be given 5 minutes to prepare the muck pile before time is started. After this period, the muck pile may not be touched by any member of the team until the time is started. This does not include a mucker/s “dug” into the pile prior to starting. In all cases, no shovel may be touching the pile prior to starting.

The event begins by tramping the empty cart down the pre-assembled track, making contact with the end of the track, and back to the muck pile. Up to 3 team members may push the cart at the beginning, ensuring no one is in front of the cart at any time. Muckers may start filling the cart once it has returned to the start. Only two muckers will be allowed to shovel material at any one time with the third mucker alternating at determined intervals. The two screeders may only level muck once it has been placed into the cart by a shovel. Screeders cannot touch the muck pile and cannot screed until the shovel is clear of the cart. Competitors may fill the cart through the back door initially but screeding can only occur from the top of the cart.

The cart is full when the level of dirt reaches the cart lip, there is no visible metal of the cart showing and the muck level is even across the top; commonly known as “maximum water level”. Only the judge can determine if the cart is full and will indicate to the competitors that it is full. The full cart is then tramped down the length of the track and back again. All five competitors may help tram the cart the second time. Time will stop when the full car touches the backstop at the end of the track nearest the muck pile.

No person may travel in front of a moving cart in any manner.

3.1.3 Scoring & Penalties

The winning team of the event in each division will be the team that completes their mucking cycle in the shortest time period. Time will be recorded to the hundredth of a second. Any PPE that comes off a competitor will result in a cease of activity for all

competitors in the event until the item/s is replaced. Time does not stop to allow for fallen PPE to be replaced.

A team will be **disqualified** if:

- A person is standing on the rail in front of the cart while it is moving in that direction,
- A person is pulling from in front of the cart at any time,
- A screeder's hand is contacted by the shovel tip,
- Three team members muck at any one time,
- The cart is derailed at any time,
- PPE falls off team member and they continue participation before replacing PPE.

Penalty	Reason
20s	Excess contact made at either end of the rail by the cart (judge is the arbiter of this penalty).
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

Time Restrictions

Teams have a maximum of five minutes to prepare their muck pile prior to their mucking cycle. In the interest of keeping to the schedule, each team must complete the event in a 25-minute period. Teams will strictly be asked to stop at the 25-minute mark and pack-up.

3.2 Swede Saw

3.2.1 PPE Requirements

The following PPE will be required at this event by all competitors:

- Steel toed boots and long legged/sleeved apparel
- Hard hat (provided)
- Gloves
- Safety glasses

3.2.2 Description

Teams of five members are given the task of cutting five slices through a 150mm by 150mm square ended section of treated pine timber. The slices are to be cut with two bow saws that are provided. One extra bow saw will be available to use if one of the two bow saws being used breaks. Blade lubricant will be available for use during the course of the event.

A section of treated pine will be braced horizontally, with seven sections marked out at 80mm intervals. Two sections are to be discarded at the discretion of the competing team due to poor quality, knots, or any other reason that the team decides on. These discarded sections will be denoted by an 'X' through that section. The remaining sections are to be cut by the competing team.

Time will start once the first competitor's blade comes in contact with the timber. Once the first member completes his or her cut, the second member may complete their cut, and so on. The team's time finishes once the fifth member completes his or her cut.

3.2.3 Scoring & Penalties

The winning team of the event in each division will be the team that completes their five slices in the shortest combined time period. If a competitor "breaks out" of his or her 80mm section into another competitors, they will be advised by the judge to re-start. If ample sections are available (e.g. the discarded blocks have not yet been cut away), a competitor will be allowed to cut into the next section. Should this happen a second time, the team will be disqualified. Any PPE that comes off a competitor will result in a cease of activity in the event until the item/s is replaced. Time does not stop to allow for fallen PPE to be replaced.

A team will be **disqualified** if:

- There is more than one saw in contact with the timber at any one time during the timed period,
- PPE falls off a team member and they continue participation before replacing the PPE

Penalty	Reason
30s	Any cut that deviates by over 50mm.
60s	Any forceful uses of the blade against the timber. Eg. Hitting the blade against an un-sliced piece of timber or excessively bending the blade to correct badly angled saw.
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

3.2.4 Time Restrictions

In the interest of keeping to the schedule, each team must complete the event in a 25-minute period. Teams will strictly be asked to stop at the 25-minute mark and pack-up.

3.3 Sandvik Airleg Drilling

3.3.1 PPE Requirements

The following PPE will be required at this event by all competitors:

- Steel toed boots and long legged/sleeved apparel
- Hard hat (provided)
- Gloves (provided but not mandatory, at discretion of Sandvik).
- Safety glasses
- Ear plugs (provided)

3.3.2 Description

Teams of two members are given the task of each drilling one hole (i.e. one hole per person for a total of two holes per team) of 700mm in length into a block of concrete. A TL29 Air Leg Drill will be used to drill the holes. Mixed teams must have at least one female and one male driller in this event. The drilling position in the block of concrete will be decided randomly prior to the competition day.

Prior to each driller drilling, the airleg will be placed on the ground, 5m from the concrete block, and with the compressed air switched off. Time starts when the driller acknowledges they are ready and the judge then begins the time. Time finishes when the drill has penetrated 700mm into the concrete block.

The drill bit may be retracted from the hole, and the airleg can be repositioned on the ground ready for the second hole to be drilled, and this process will not be counted towards the driller's time. The second driller will complete a hole next to and parallel to the first with the same timing guidelines. The pair of holes will be scored primarily on their accuracy based on two poles, inserted into the holes, and their distance apart measured at two points. Accurate drillers with the best times will win the event.

All competitors must have a collarer when drilling. The collarer can only hold the drill steel and air hoses and is not allowed to touch the airleg. Following this, it is advised that the collarer informs the driller on the position of the drill steel to improve accuracy. One team member will be assigned hoses as a "safety" to cut the air to the drill if directed by the judge.

3.3.3 Scoring & Penalties

The winning team of the event in each division will be the team that completes their holes with the best accuracy, in the shortest time. Accuracy will be scored as a deviation in mm. Time will be measured to the one hundredth of a second and will be the combined time of both drillers. Any PPE that comes off a competitor will result in a cease of activity for all competitors in the event until the item/s is replaced. Time does not stop to allow for fallen PPE to be replaced.

A team will be **disqualified** if either:

- PPE falls off a team member and they continue participation before replacing PPE.
- The collarer touches the airleg.

Penalty	Reason
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

3.3.4 Time Restrictions

In the interest of keeping to the schedule, each team must complete the event in a 25-minute period. Teams will strictly be asked to stop at the 25-minute mark and pack-up.

3.4 Track Set

3.4.1 PPE Requirements

The following PPE will be required at this event by all competitors:

- Steel toed boots and long legged/sleeved apparel
- Hard hat (provided)
- Gloves
- Safety glasses

3.4.2 Description

The following equipment will be provided:

- Existing assembled piece of rail
- 2 x 4.5m rail
- x 150mm x 150mm x 1200mm sleepers
- 1 x 610mm gauge
- x Fish plates
- 10 x Bolts and nuts
- 22 x 10mm by 100mm dog spikes (two spare)
- 2 x Spiking hammers
- 2 x Gympie hammers
- Spray paint
- 2 x Popsicle sticks

Four members from each team will compete in the rail set event with a fifth member acting as a foreman (coach). The foreman is not allowed to touch any tools or materials and may only give instructions, point out problems and help keep the team running smoothly.

Each team must install two lengths of 15kg/m rail on five sleepers to a 610mm gauge. The rails must be connected to an existing piece of rail by means of four joint bars ("fish plates") and eight bolts. The bolts in the fishplates must have the nuts on the outside of the set of rails. Bolts must be just tightened enough so that they cannot be loosened by hand. The rails must be held in place on the sleepers by 4 rail spikes per sleeper, with one on each side of each rail. While 20 spikes are required, 2 spare spikes will be provided.

Teams will be timed for both the construction and dismantling of the track. Prior to timing, teams will be given 10 minutes to level and prepare the ground where the track will be constructed. The teams will then stand behind a designated line with all of their materials and equipment. A judge will indicate the time starting and the team will then be able to bring all material and tools past the line and construct the track. Once the cycle has been completed, all members and tools are to move behind the line again, and the foreman will be required to call "time" before the judge stops the clock.

The teams track will then be inspected for quality and any penalties recorded. If any team member travels under or over a piece of moving rail during the event, the team will be disqualified.

Teams will then be timed in the same way on the dismantling of the rail section. Teams will not be allowed to elevate the section of rail in order to hit the sleepers loose; doing so will result in disqualification. All materials including tools should be removed behind

the line prior to the foreman calling “time” once again for the dismantle completion. Any items left on the field will incur time penalties.

3.4.3 Scoring & Penalties

The team in each division with the quickest combined construction and dismantlement time, after penalties have been applied, will be determined the winner of the event in that division. Time will be recorded to the hundredth of a second. In the event that a tie exists for one or more of the top three placings, the team with the fewest time penalties will be declared the higher ranked team. Any PPE that comes off a competitor will result in a cease of activity for all competitors in the event until the item/s is replaced. Time does not stop to allow for fallen PPE to be replaced. The time penalties for this event are as follows:

A team will be disqualified if:

- PPE falls off a team member and they continue participation before replacing PPE.
- For travelling under or above a moving rail.
- Elevating a constructed track.
- Throwing tools or equipment greater than 1m.
- During the “setting” or “spiking” stage of track construction, a rail spike flies out of control or “pings” a greater distance than 50cm.

Penalty	Reason
10s	Per item that is left in front of the line following either the construction or dismantling stage.
10s	For every spike that is not driven within a popsicle thickness of the rail.
Further 20s (total of 30s per spike)	For any spike not driven within a thumb width of the rail.
20s	For each bolt that is not tightened to the criteria set out.
20s	For each hanging tie – failure of the rail to be within two popsicle thicknesses of its respective sleeper.
30s	Every spike that is left in its sleeper after disassembly.
30s	For each spike that has its lip facing away from the rail.
40s	Gauge of the rail set is not correct.
60s	Excessive use of the smaller (gympie) hammers by using them to do anything more than start a dog spike.
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

3.4.4 Time Restrictions

A 10-minute preparation window will be provided for each team; teams have 25 minutes to complete the entire event from assembly to disassembly.

Teams will strictly be asked to stop at the 25-minute mark and pack-up.

3.5 Gold Panning

3.5.1 PPE Requirements

The following PPE will be required at this event by all competitors:

- Steel toed boots and long legged/sleeved apparel
- Hard hat (provided)
- Safety glasses

3.5.2 Description

The following equipment will be provided:

- 1 x Gold pan each
- 1 x Gold panning wash drum
- 5 x Flattened lead BBs (ball bearings) each
- Approximately 400g of gravel/sand each
- Stopwatches

Five members of each team are required for this event. Each competitor will be given a gold pan full of gravel, containing 5 flattened lead ball bearings (BBs). When a competitor has found all five BBs and placed them in the judge's hand, he or she will call "time".

The cumulative time for all five competitors will be added together with the lowest team time declared the winner. All competitors will start with his or her pan on the lip of the gold pan trough. Once the judge signals, timing will start and the competitor will be allowed to pan for the BBs. The competitor is responsible for placing each BB in the judge's hand.

Each BB that is lost in the panning process or in the process of getting the BB from the pan into the judge's hand will result in a 5-minute penalty. Competitors may help one another "spot" BBs. A competitor may not touch another competitor's pan or material. Failure to comply will result in disqualification.

3.5.3 Scoring & Penalties

The winning team of the event in each division will be the team that has the quickest combined time amongst their five members. Time will be recorded to the closest hundredth of a second. Any PPE that comes off a competitor will result in a cease of activity for all competitors in the event until the item/s is replaced. Time does not stop to allow for fallen PPE to be replaced.

Penalty	Reason
1 min	For every BB lost.
5 min	If one member touches the gold pan or the materials inside it of another team member.
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

3.5.4 Time Restrictions

In the interest of keeping to the schedule, each team must complete the event in a 25-minute period. Teams will strictly be asked to stop at the 25-minute mark and pack-up.

3.6 Rock ID

3.6.1 PPE Required

The following PPE will be required at this event by all competitors;

- Steel toed boots and long legged/sleeved apparel

3.6.2 Description

The following equipment will be provided:

- 10 x Rock samples
- 10 x Mineral samples
- 1 x Streak plate
- 1 x Container of HCL
- 1 x Hand lens
- 1 x Hardness testing pack

Teams of five members are required to determine the identity of 10 specific rock samples and 5 specific mineral samples from a pool of 20-25 samples. The samples for each group will be selected at random by the judge. The only tools allowed will be general rock ID tools: streak plates, diluted HCl, hand lens and hardness testing gear. No written resources permitted during the event.

3.6.3 Scoring & Penalties

The winning team of the event in each division will be the team that correctly identifies the most rocks and minerals. Both rocks and minerals carry the same weighting towards this calculation. Time taken to complete the task will be used to differentiate between two teams with the same score.

Penalty	Reason
DQ	Team damages the aids available for use, or if they use an aid other than those provided.
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

3.6.4 Time Restrictions

In the interest of keeping to the schedule each team must complete the event in a 25-minute period. Teams will strictly be asked to stop at the 25-minute mark and pack-up.

3.7 Blast Face Tie-In

3.7.1 PPE Requirements

The following PPE will be required at this event by all competitors:

- Steel toed boots and long legged/sleeved apparel
- Hard hat (provided)
- Safety glasses

3.7.2 Description

The following equipment will be provided:

- 1x Pre-drilled mock rock face
- Dummy delay detonators
- Blank face design

Teams of five members have 20 minutes to design an initiation sequence, load and tie in an underground development heading blast. The blast holes have already been drilled; it is up to the team to determine what delay detonator you use in each of the blast holes in order to give a firing sequence that will yield a good result.

Once holes have been allocated a delay, the face must be tied in correctly ready for firing. The event is to be treated as though it was in a real mining situation and that the dummy detonation leads are live.

Once the 20 minutes have elapsed, teams will be assessed on how far they have progressed.

3.7.3 Scoring & Penalties

The winning team of the event in each division will be the team with the highest score among that respective division.

Any PPE that comes off a competitor will result in cease of activity in the event until the item is replaced, at which time the event can continue from the point at which it was stopped. Time does not stop to allow for fallen PPE to be replaced. A team will be disqualified if PPE falls off a team member and they continue participation before replacing PPE.

Care must be taken by all team members to ensure that no mobile devices are not present on the bench, if this rule is not heeded, the respective team member must place his/her device in the allocated area before the task can continue. Failure to do so can result in disqualification.

As the leads are treated as live, participants must take care to not trip over dummy dets/cord. A safety penalty will be deducted if the rule is not followed.

At the judge's discretion, marks will be provided to the team for the following criteria:

- Safety – out of 30
- Teamwork – out of 20
- Design – out of 20
- Execution – out of 20

- Time – out of 10

The maximum possible score is 100 for perfect execution of the exercise in the fastest time amongst the division. Time will be recorded to the closest hundredth of a second. Any PPE that comes off a competitor will result in a cease of activity for all competitors in the event until the item/s is replaced. In the event of a tied score for one or more of the top three placings, the time taken by each team will be used to decide their respective rankings in the event. In the event of a tie remaining unsettled, the safety score will be used as a secondary determinant.

Penalty	Reason
DNF	Exceeding time limit. This will place the team in higher positions than disqualified teams.

3.7.4 Time Restrictions

In the interest of keeping to the schedule, each team must complete the event in a 20-minute period. Teams will strictly be asked to stop at the 20-minute mark and pack-up.

APPENDIX 1 – RISK ASSESSMENT TEMPLATE

Event: _____ Team Name: _____ Team Captain Signature: _____

Task/Activity	Potential Hazard	Current Energy Controls	Type	Likelihood	Consequence	Score	Recommended Additional Energy Controls

APPENDIX 2 – RISK ASSESSMENT MATRIX

Risk Assessment Matrix

Loss Type		Hazard Effect/ Consequence				
		1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
(P) Harm to People		Slight injury or health effects – first aid/ minor medical treatment level	Minor injury or health effects – restricted work or minor lost workday case	Major injury or health effects – major lost workday case/ permanent disability	Permanent total disabilities, single fatality	Multiple fatalities
(E) Environmental Impact		Environmental nuisance	Material environmental harm	Serious environmental harm	Major environmental harm	Extreme environmental harm
(A) Asset Damage & Other Consequential Losses		Slight damage <\$5000. No disruption to operation	Minor damage \$5000 to \$50,000. Brief disruption to operation	Local damage \$50,000 to \$500,000. Partial shutdown	Major damage \$500,000 to \$1M. Partial loss of operation	Extreme damage > \$1M. Substantial or total loss of operation
(R) Impact on Reputation		Slight impact – public awareness may exist but no public concern	Limited impact – some local public concern	Considerable impact – regional public concern	National impact – national public concern	International impact – international public attention
Likelihood	Likelihood Examples (use only as a guide for evaluation of uncontrolled hazards)	Risk Rating				
A (Almost certain)	Likely that the unwanted event could occur several times per year at this location	15 (M)	10 (H)	6 (H)	2 (Ex)	1 (Ex)
B (Likely)	Likely that the unwanted event could occur several times per year; or could happen annually	19 (M)	14 (M)	9 (H)	4 (Ex)	3 (Ex)
C (Possible)	The unwanted event could well have occurred in the mining industry at some time in the past 10 years	22 (L)	18 (M)	13 (H)	8 (H)	5 (Ex)
D (Unlikely)	The unwanted event has happened in the mining industry at some time; or could happen in 100 years	24 (L)	21 (L)	17 (M)	12 (H)	7 (H)
E (Rare)	The unwanted event has never been known to occur in the mining industry; or is highly unlikely that it could ever occur	25 (L)	23 (L)	20 (M)	16 (M)	11 (H)

Risk Matrix Rating	Risk Level	Risk Management control guide
1 to 5	(Ex) – Extreme – Immediate correction required – Eliminate, avoid or implement specific plans – Standards to manage & monitor	Recommend implementation – minimum of 2 hard control Barriers and 2 soft controls
6 to 13	(H) – High – Should receive attention as soon as possible – Proactively	Recommend implementation – minimum of 2 hard control Barriers and 2 soft controls
14 to 20	(M) – Medium – Should be dealt with as soon as possible but situation	Recommend implementation – minimum of 1 hard control Barriers and 2 soft controls
21 to 25	(L) – Low – Risk is normally acceptable – Monitor & manage as	Monitor and Manage

Design
Eliminate
Substitute
Redesign
Separate Action
PPC

APPENDIX 3 – SCORE SHEETS

SCORE SHEET

Hand Mucking

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	

SCORE SHEET

Swede Saw

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	

SCORE SHEET

Sandvik Airleg Drilling

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	

SCORE SHEET

Track Set

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	

SCORE SHEET

Gold Panning

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	

SCORE SHEET

Rock ID

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	

SCORE SHEET

Blast Face Tie-In

Team Name:

	Total	Notes/Comments
Time		
Penalties		
Score	Safety =/30 Teamwork =/20 Design =/20 Execution =/20 Time =/10	
Risk Assessment Score (Scale of 1-5. 1 – missing most hazards, to 5 – identifies most hazards)/5	