Rank	Category Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK						
			L	sd-L	С	sd-C	Risk	
1	Occupational Disease	Silica	4.13	0.83	4.50	0.53	18.56	
2	Occupational Disease	Excessive dust from crushing and screening operations	4.50	0.53	4.00	0.93	18.00	
3	Mobile Equipment	Distracted Driving (heavy equipment, company light vehicle, personal vehicle, cell phones)	4.13	0.64	4.13	0.83	17.02	
4	Slips, Trips and falls	Slips, trips and falls from different elevations	4.00	0.53	4.13	0.64	16.50	
5	Fatigue	Fatigue (seasonal)	4.00	0.76	4.00	0.76	16.00	
6	Maintenance	Lack of maintenance of equipment (resulting in Falls, entrapment, electrocution, fires)	3.75	0.71	4.13	0.64	15.47	
7	Crushing and Screening	Freeing jammed material from crusher	3.88	0.64	3.88	0.83	15.02	
8	IRS	Dysfunctional IRS	3.88	0.83	3.88	0.64	15.02	
9	Mobile Equipment	Lack of Tire safety	3.63	0.74	4.13	0.35	14.95	
10	Electrical	Electrical Contact	3.63	0.74	4.13	0.64	14.95	
11	Mobile Equipment	Injury due to Haulage vehicles	3.63	0.74	4.13	0.64	14.95	
12	Fatigue	Shift work causing fatigue	4.00	0.53	3.63	0.74	14.50	
13	Training	Spare supervisor not making the right decisions	4.00	0.76	3.63	0.74	14.50	
14	Working Alone	Working Alone	4.13	0.64	3.50	0.76	14.44	
15	Falls from Heights	Working at heights on equipment	3.63	0.52	3.88	0.64	14.05	
16	Psychosocial	Stress	4.13	0.64	3.38	0.52	13.92	

Rank	nk Category Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK						
			L	sd-L	С	sd-C	Risk	
17	Occupational Disease	Exposure to dust (resulting in respiratory issues)	3.75	0.71	3.63	0.74	13.59	
18	Falls from Heights	Working from heights from crushing, screening or conveying equipment	3.63	0.52	3.75	0.46	13.59	
19	Fatigue	Sleep deprivation	3.63	0.52	3.75	0.71	13.59	
20	Mobile Equipment	Poor visibility and blind spots for mobile equipment operators	3.63	0.74	3.75	0.71	13.59	
21	Training	New Worker injuries	3.63	0.74	3.75	0.71	13.59	
22	Training	Inability of contractors to recognize hazards	3.63	0.52	3.63	0.74	13.14	
23	MSD	Overexertion	3.75	0.46	3.50	0.76	13.13	
24	Fatigue	Mobile equipment operator fatigue	3.63	0.52	3.50	0.53	12.69	
25	Slips, Trips and falls	Improper mounting and dismounting from vehicles	3.63	0.52	3.50	0.76	12.69	
26	Stockpiles	Stock pile collapse (frozen top material and then undercutting. Unstable due to blasting, erosion, thawing or drying out)	3.50	0.53	3.63	0.52	12.69	
27	Training	Supervisors making the wrong decisions	3.50	0.93	3.63	0.74	12.69	
28	Water	Open water in pits	3.38	0.52	3.75	0.89	12.66	
29	Crushing and Screening	Crusher or conveyor blockages (leading to M.S.D.'s, entrapment, being struck, or falls)	3.88	0.64	3.25	0.46	12.59	
30	Falls from Heights	Working at Heights	3.25	0.71	3.88	0.83	12.59	
31	Mobile Equipment	Vehicle roll-overs (or going over edge of embankment)	3.13	0.64	4.00	0.76	12.50	
32	Slips, Trips and falls	Slips, trips and falls from the same surface	3.50	0.53	3.50	0.76	12.25	

Rank	C Category Eve	Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?			RISK			
			L	sd-L	С	sd-C	Risk	
33	Training	Young Worker injuries	3.50	0.53	3.50	0.76	12.25	
34	Mobile Equipment	Lack of traffic control systems	3.50	0.76	3.50	0.53	12.25	
35	Occupational Disease	Exposure to dust when recycling concrete	3.63	0.74	3.38	0.52	12.23	
36	Falls from Heights	Working from heights off of mobile equipment	3.38	0.74	3.63	0.52	12.23	
37	Crushing and Screening	Lack of adequate lock and tag procedures	2.88	0.83	4.25	0.46	12.22	
38	Crushing and Screening	Structural collapse of equipment	2.88	0.83	4.25	0.71	12.22	
39	Occupational Disease	Exposure to noise during crushing, screening and conveying	3.75	0.46	3.25	0.71	12.19	
40	MSD	Lack of Ergonomics (lifting, sitting at work station, having the proper tools for the task)	3.75	0.71	3.25	0.46	12.19	
41	Mobile Equipment	Non-haulage vehicle incidents	3.25	0.46	3.75	0.71	12.19	
42	Stockpiles	Working in and around stockpiles (possible if hazards are not recognized )	3.25	0.46	3.75	0.71	12.19	
43	Mobile Equipment	Lack of procedure to deal with hydraulic energy on equipment	3.13	0.35	3.88	0.35	12.11	
44	Mobile Equipment	Struck by vehicle incidents (vehicle or pedestrians)	3.00	0.76	4.00	0.76	12.00	
45	Training	Lack of proper training	3.50	0.53	3.38	0.52	11.81	
46	Crushing and Screening	Removing oversize rocks from the various types of crushers	3.38	1.06	3.50	0.53	11.81	
47	Mobile Equipment	Vehicle roll-overs	3.25	0.46	3.63	0.74	11.78	
48	Stockpiles	Loose or unconsolidated stockpiles - winter	3.25	0.46	3.63	0.74	11.78	

Rank	nk Category Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK						
			L	sd-L	С	sd-C	Risk	
49	Training	Mobilizing or de-mobilizing stationary equipment	3.25	0.46	3.63	0.74	11.78	
50	Water	Water hazards around sludge ponds	3.25	0.46	3.63	0.74	11.78	
51	Emergency Preparedness	Lack of Emergency Showers	3.25	0.71	3.63	0.52	11.78	
52	Guarding	Unguarded conveyor belts	3.25	0.71	3.63	0.74	11.78	
53	WHIMIS	Chemical burns	3.13	0.35	3.75	0.46	11.72	
54	Water	Water hazards for dragline operators	3.13	0.35	3.75	0.71	11.72	
55	Psychosocial	Drug abuse (prescribed, over the counter and recreationa)	3.13	0.64	3.75	0.71	11.72	
56	Blasting	Explosives in the muck pile	3.13	1.13	3.75	0.71	11.72	
57	Stockpiles	Workers buried in stockpiles	2.50	0.76	4.63	0.52	11.56	
58	Falls from Heights	Inadequate ladders, walkways, platforms on crushing, screening, and conveying equipment	3.38	0.52	3.38	0.74	11.39	
59	Water	The effects of spring run-off water	3.50	0.76	3.25	0.46	11.38	
60	Mobile Equipment	Overloaded and/or insecured loads in haulage vehicles	3.50	0.93	3.25	0.46	11.38	
61	Mobile Equipment	Improperly maintained haulage roads	3.50	0.93	3.25	0.71	11.38	
62	Psychosocial	Alcohol abuse	3.25	0.46	3.50	0.76	11.38	
63	Water	Water hazards around fresh water ponds	3.25	0.46	3.50	0.76	11.38	
64	Electrical	Electrical installation standards for labelling not followed	3.25	0.71	3.50	0.53	11.38	

Rank	Category Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK						
			L	sd-L	С	sd-C	Risk	
65	Maintenance	Improperly maintained haulage vehicles	3.25	0.71	3.50	0.53	11.38	
66	Blasting	Flyrock	3.25	0.89	3.50	1.20	11.38	
67	Stockpiles	Insufficient edge protection	3.38	0.52	3.25	0.46	10.97	
68	Environmental	Wildlife hazards (e.g. Bears, geese etc.)	3.38	0.52	3.25	0.46	10.97	
69	Occupational Disease	Inadequate ventilation in shops and garages	3.50	0.53	3.13	0.64	10.94	
70	Crushing and Screening	Improperly maintained equipment	3.50	0.76	3.13	0.64	10.94	
71	Occupational Disease	Excessive dust from drilling	3.50	0.76	3.13	0.83	10.94	
72	Occupational Disease	Lack of dust control during haulage of materials	3.75	0.46	2.88	0.83	10.78	
73	Maintenance	Inadequate or compromised Lockout	2.88	0.35	3.75	0.71	10.78	
74	Mobile Equipment	Brake failures	2.88	0.64	3.75	0.46	10.78	
75	Stockpiles	Workers buried in material in hoppers or bins	2.50	0.53	4.25	0.46	10.63	
76	Emergency Preparedness	Lack of Backup power supply during power failures	3.25	0.46	3.25	0.71	10.56	
77	Falls from Heights	Working in and around high walls (beneath and on top ) & cliff edges	3.13	0.64	3.38	0.52	10.55	
78	Confined Spaces	Inability to recognize a confined space (confined space at a height)	3.13	0.64	3.38	0.74	10.55	
79	Ground Stability	Dealing with scaling and overhangs	3.00	0.76	3.50	0.53	10.50	
80	Mobile Equipment	Loss of control of mobile equipment	3.00	1.07	3.50	0.53	10.50	

Rank	Category Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK						
			L	sd-L	С	sd-C	Risk	
81	Maintenance	Electrical explosion	2.63	0.52	4.00	0.53	10.50	
82	Ground Stability	The adverse effects of underground mining on ground stability in surface mines	2.88	0.64	3.63	0.92	10.42	
83	Training	Lack of appropriate operating procedures for crushing, screening and conveying	3.13	0.35	3.25	0.46	10.16	
84	Environmental	Biological hazards (e.g. West Nile, Lyme's)	3.13	0.64	3.25	0.71	10.16	
85	Mucking	Uncontrolled movement of muck pile while mucking	3.13	0.83	3.25	0.46	10.16	
86	Mine Design	Excessively steep or narrow roads	3.13	0.83	3.25	0.89	10.16	
87	Mucking	Oversize muck	3.38	0.74	3.00	0.76	10.13	
88	Occupational Disease	Exposure to vibration during crushing, screening and conveying	3.38	0.74	3.00	0.76	10.13	
89	Guarding	Lack of machinery guarding (e.g. leading to entrapment or accidental start up)	3.00	0.53	3.38	0.52	10.13	
90	Electrical	Electrical installation standards for running wire not followed	3.00	0.76	3.38	0.52	10.13	
91	Mine Design	Compromised crown pillar separating surface from underground mining	2.50	0.53	4.00	0.53	10.00	
92	Electrical	Electrical panel boxes that malfunction	2.50	0.93	4.00	0.53	10.00	
93	Water	Excessive accumulation of water on pit or quarry floor	3.63	0.74	2.75	0.71	9.97	
94	Training	Lack of adequate lock and tag procedures	2.75	0.46	3.63	0.74	9.97	
95	Guarding	Lack of appropriate guarding and working pull cords in crushing, screening and conveying	2.75	1.04	3.63	0.52	9.97	
96	Mobile Equipment	Mobile equipment contact with overhead power line	2.63	0.74	3.75	0.46	9.84	

Rank	Category E	Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?			RISK			
			L	sd-L	С	sd-C	Risk	
97	Blasting	Inadvertent remote detonation of blasts	2.25	0.89	4.38	0.52	9.84	
98	Training	Lack of proper loading and dumping procedures	3.13	0.64	3.13	0.35	9.77	
99	Occupational Disease	Exposure to drill noise	3.13	0.83	3.13	0.64	9.77	
100	Blasting	Undetonated holes resulting in irregular bench walls	3.00	0.93	3.25	1.04	9.75	
101	Falls from Heights	Working from heights from a drill unit	2.88	0.99	3.38	0.74	9.70	
102	Blasting	Improper blast guarding, signage and sirens	2.50	0.76	3.88	0.64	9.69	
103	Mine Design	Starting up a pit without proper checks & balances	2.75	0.71	3.50	0.53	9.63	
104	Mine Design	Pit wall angle too steep or too high	2.75	0.89	3.50	0.53	9.63	
105	Mobile Equipment	Lack of high visability clothing	3.13	0.83	3.00	0.53	9.38	
106	Emergency Preparedness	Lack of fire procedures in shops and garages	2.88	0.83	3.25	0.71	9.34	
107	Blasting	Premature detonation by lightening or stray currents	2.25	1.04	4.13	0.83	9.28	
108	Training	Regulation 854 S- 11 MTCU mandatory module training not being followed	3.13	0.64	2.88	0.35	8.98	
109	Ground Stability	Fall of ground or uncontrolled soil collapses (due to local rock and/or soil conditions)	2.88	0.64	3.13	0.35	8.98	
110	Stockpiles	Loose or unconsolidated stockpiles - summer	2.88	0.64	3.13	0.35	8.98	
111	Ground Stability	Gound instability while mucking	2.75	0.46	3.25	0.46	8.94	
112	Water	An inrush of fluidized overburden	2.75	0.46	3.25	0.46	8.94	

Rank	Category Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK						
			L	sd-L	С	sd-C	Risk	
113	Emergency Preparedness	No valid emergency preparedness plan in place	2.75	0.71	3.25	0.46	8.94	
114	Falls from Heights	Condoning working at heights from the bucket of a front end loader	2.63	0.74	3.38	0.74	8.86	
115	Environmental	Injuries due to lightning strikes	1.88	0.64	4.50	0.53	8.44	
116	Electrical	Genset safety	2.75	0.46	3.00	1.20	8.25	
117	Maintenance	Improperly maintained mucking equipment	2.75	0.71	3.00	0.53	8.25	
118	Maintenance	Improperly maintained drilling equipment	2.63	0.74	3.13	0.35	8.20	
119	Emergency Preparedness	Lack of appropriate eye wash stations	2.63	0.74	3.13	0.99	8.20	
120	Blasting	Inadequate or no pre-blast design	2.50	1.07	3.25	0.71	8.13	
121	Emergency Preparedness	Lack of Rescue and First Aid training	2.38	0.52	3.38	0.52	8.02	
122	Blasting	Premature detonation as a result of drilling into explosives	1.88	0.64	4.25	0.46	7.97	
123	Guarding	Struck by material falling from conveyor	2.75	0.71	2.88	0.83	7.91	
124	Blasting	Improperly stored explosives and detonators	2.25	0.71	3.50	0.76	7.88	
125	Maintenance	Improper use of Torches/Welding	2.50	0.53	3.13	0.64	7.81	
126	Guarding	Caught in conveyor or any moving equipment	1.88	0.35	4.13	0.64	7.73	
127	Ground Stability	Gound instability while drilling	2.63	0.92	2.88	0.64	7.55	
128	Occupational Disease	Exposure to blast gases	2.63	1.06	2.75	0.46	7.22	

Rank	nk Category Event (Situation/Condition) that could result in Injury or Illness OR What could	Event (Situation/Condition) that could result in Injury or Illness OR What could keep you up at night?	RISK					
			L	sd-L	С	sd-C	Risk	
129	Mine Design	Poor infrastructure planning	2.50	0.53	2.88	0.35	7.19	
130	Guarding	Entanglement around rotating drill steel	2.13	0.83	3.38	1.06	7.17	
131	Training	Movement of drill unit mast while drilling	2.38	0.52	3.00	0.93	7.13	
132	Emergency Preparedness	Lack of functional fire extinguishers in shops and garages	2.38	0.52	3.00	1.07	7.13	
133	Blasting	Incomplete blasting records	2.63	0.74	2.63	1.19	6.89	
134	Illumination	Insufficient lighting while drilling or blasting	2.50	0.53	2.75	0.71	6.88	
135	Mine Design	Close proximity to overburden while drilling	2.50	0.76	2.75	1.04	6.88	
136	Illumination	Insufficient lighting while mucking	2.50	0.53	2.63	0.52	6.56	
137	Mine Design	Improperly stored diesel fuel	2.50	0.53	2.63	0.74	6.56	
138	Occupational Disease	Exposure to blast concussion or vibrations	2.38	0.74	2.63	0.74	6.23	
139	Mine Design	Opening of Pit without proper design	2.25	0.89	2.75	0.71	6.19	
140	Mine Design	Falling trees during production	1.88	0.64	2.63	1.06	4.92	